

# SERVICE MANUAL

COMPACT DISC/  
STEREO CASSETTE RECEIVER

BASIC TAPE MECHANISM : 2ZM-3MK2 PR4NM  
BASIC CD MECHANISM : AZG-1 ZD8RDM

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX-SZ50	CX-NSZ50	SX-WNSZ50	RC-ZAS01

- This Service Manual is the "Revision Publishing" and replaces "Simple Manual" NSX-SZ50 <HR> (S/M Code No. 09-004-424-6T3).
- If requiring information about the CD mechanism, see Service Manual of AZG-1, (S/M Code No. 09-001-335-3N6).

## SPECIFICATIONS

### Main unit CX-NSZ50

#### FM tuner section

<b>Tuning range</b>	87.5 MHz to 108 MHz
<b>Usable sensitivity (IHF)</b>	13.2 dBf
<b>Antenna terminal</b>	75 ohms (unbalanced)

#### MW tuner section

<b>Tuning range</b>	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
<b>Usable sensitivity</b>	350 $\mu$ V/m
<b>Antenna</b>	Loop antenna

#### SW tuner section

<b>Tuning range</b>	5.730 MHz to 17.900 MHz
<b>Antenna</b>	Wire antenna

#### Amplifier section

##### Mid-high frequency amplifier

<b>Power output</b>	Rated: 20 W + 20 W (8 ohms, T.H.D. 1 %, 1 kHz) Reference : 25 W + 25 W (8 ohms, T.H.D. 10 %, 1 kHz)
<b>Total harmonic distortion</b>	0.1 % (10 W, 1 kHz, 8 ohms, DIN AUDIO)

##### Low frequency amplifier

<b>Power output</b>	Rated: 60 W + 60 W (6 ohms, T.H.D. 1 %, 130 Hz) Reference : 75 W + 75 W (6 ohms, T.H.D. 10 %, 130 Hz)
<b>Total harmonic distortion</b>	0.1 % (30W, 130 Hz, 6 ohms, DIN AUDIO)

**Inputs** VIDEO/AUX: 500 mV

MIC: 1.0 mV (10 k ohms)

**Outputs** SPEAKERS HIGH FREQ:  
accept speakers of 8 ohms or more  
SPEAKERS LOW FREQ:  
accept speakers of 6 ohms or more  
SURROUND SPEAKERS:  
accept speakers of 8 ohms to 16 ohms  
PHONES (stereo jack): accepts headphones of 32 ohms or more

### Cassette deck section

<b>Track format</b>	4 tracks, 2 channels stereo
<b>Frequency response</b>	50 Hz – 15000 Hz
<b>Recording system</b>	AC bias
<b>Heads</b>	Deck 1: Playback head x 1 Deck 2: Recording/playback head x 1, erase head x 1

### Compact disc player section

<b>Laser</b>	Semiconductor laser ( $\lambda$ = 780 nm)
<b>D-A converter</b>	1 bit dual
<b>Signal-to-noise ratio</b>	85 dB (1 kHz, 0 dB)
<b>Harmonic distortion</b>	0.05 % (1 kHz, 0 dB)
<b>Wow and flutter</b>	Unmeasurable

### General

<b>Power requirements</b>	120 V/220-230 V/240 V AC switchable, 50/60 Hz
<b>Power consumption</b>	150 W
<b>Power consumption in standby mode</b>	If the power-economizing mode is ECO OFF: 20 W If the power-economizing mode is ECO ON or ECO AUTO: 0.9 W
<b>Dimensions of main unit (W x H x D)</b>	260 x 326 x 345 mm
<b>Weight of main unit</b>	9.0 kg

### Speaker system SX-WNSZ50

<b>Speaker system</b>	3 way, Built-in subwoofer (magnetic shielded type)
<b>Speaker units</b>	Subwoofer: 160 mm cone type Full range: 100 mm cone type Super tweeter: 20 mm ceramic type
<b>Impedance</b>	6 ohms/8 ohms
<b>Sensitivity</b>	87 dB/W/m
<b>Dimensions (W x H x D)</b>	240 x 324 x 271 mm
<b>Weight</b>	4.8 kg

- Design and specifications are subject to change without notice.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound, Inc.
- Under license from BBE Sound, Inc.

## ACCESSORIES LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

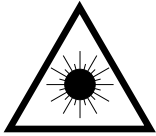
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF8-901-010	IB,H (ECA) M	
2	8Z-NF8-702-010	RC UNIT, RC-ZAS01	
3	87-006-226-010	ANT, LOOP AM	
4	87-043-115-010	FEEDER-ANT, FM	
5	87-A90-119-010	ANT, WIRE SW (5M)	
6	87-A91-017-010	PLUG, CONVERSION JT-0476	

## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

### WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

### VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylitäville näkymättömälle lasersäteilylle.

### WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### ATTENTION

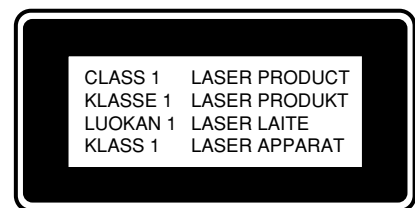
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

### ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

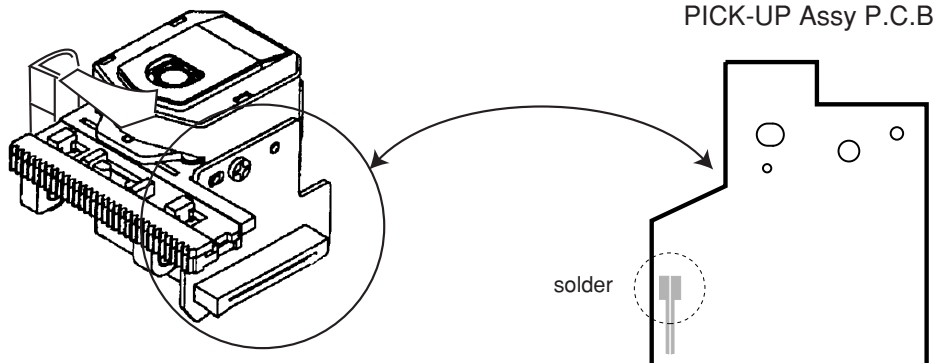
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



## Precaution to replace Optical block (KSM-880CAB)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in the right figure.



NOTE ON BEFORE STARTING REPAIR

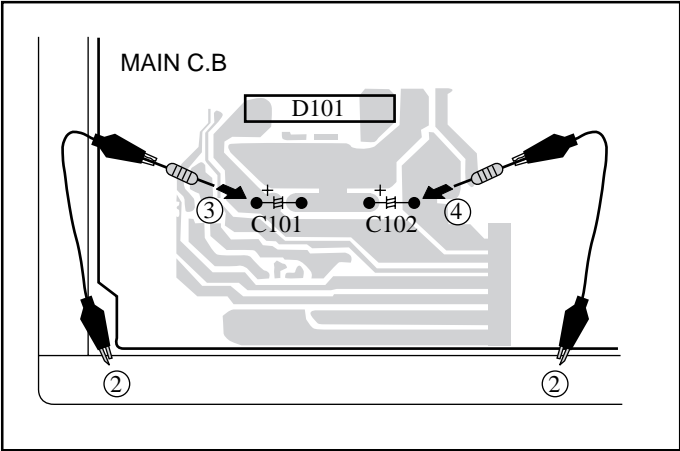
1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.

In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

- ① Remove the AC power cord.
- ② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
- ③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
- ④ Contact the same end of the discharging resistor as step 3 to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
- ⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.



Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor ( )	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

**Note:** The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is “H”, the MICROCOMPUTER is judged to be operating correctly. When this terminal is “L”, the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.

When the MICROCOMPUTER is not defective, the HOLD terminal can also go “L” when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to “L”.

• Good or no good judgement of the MICROCOMPUTER

- ① Turn on the AC main power.
- ② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the “H” level or not.
- ③ When the HOLD terminal is “L” level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

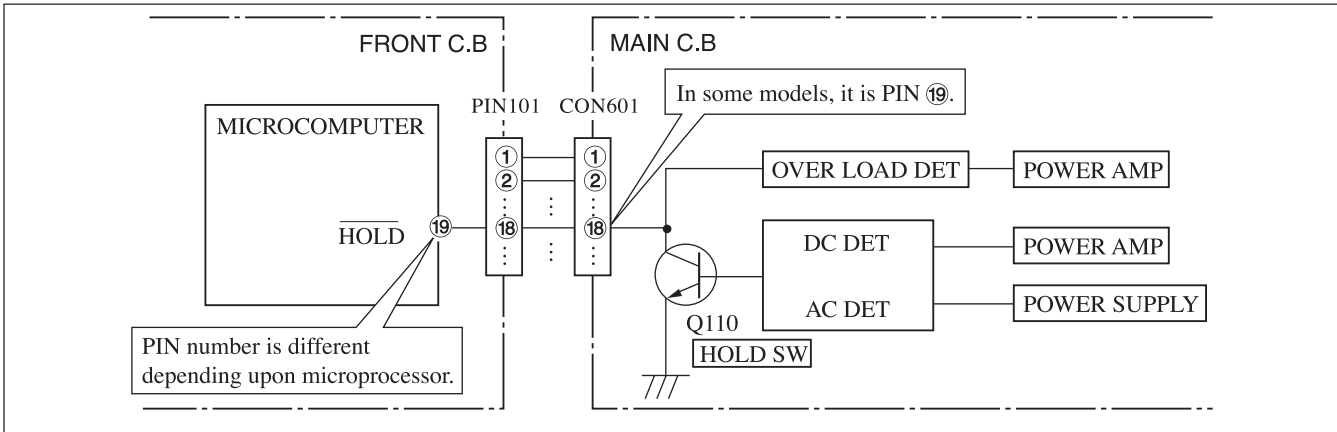


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

## 2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.

When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

- ① Remove the AC power cord.

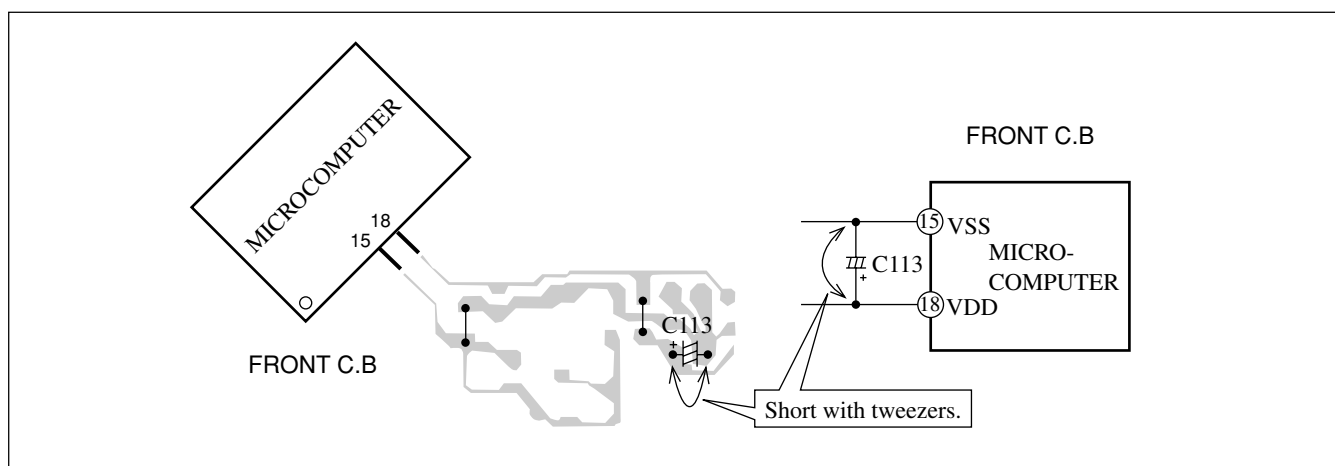


Fig-2-2

- ② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
- ③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

**Note:** The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

## 2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

# ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C0010	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-020-454-010	IC, DN6851		C0011	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-417-010	IC, STK490-310		C0012	87-012-368-080		C-CAP,S 0.1-50 Z F
	8A-NF8-612-110	C-IC, LC866548V-5P40		C0015	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-396-010	IC, STK490-040		C0016	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-629-010	IC, SPS-442-1-N		C0017	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-419-040	C-IC, NJM14558MD-TE2		C0018	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A21-023-040	C-IC, BA3835F		C0019	87-016-520-000		CAP,E 3300-65 M SMG
	87-070-289-040	C-IC, BU2092F		C0020	87-016-520-000		CAP,E 3300-65 M SMG
	87-A21-401-040	C-IC, M61503FP		C0021	87-016-051-000		CAP,E 2200-35 M SMG
	87-A21-415-010	IC, LA1843		C0022	87-016-051-000		CAP,E 2200-35 M SMG
	87-070-127-110	IC, LC72131D		C0023	87-016-658-000		CAP,E 4700-35 M SMG
				C0024	87-016-658-000		CAP,E 4700-35 M SMG
				C0025	87-010-408-080		CAP,E 47-50 M 11L SME
				C0026	87-010-247-080		CAP,E 100-50 M SME
TRANSISTOR				C0030	87-010-430-080		CAP,E 100-63
	87-026-451-080	TR, 2SA933S		C0031	87-010-263-080		CAP,E 100-10 M 11L SME
	87-026-609-080	TR, KTA1266GR		C0032	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	89-213-702-010	TR, 2SB1370E		C0034	87-010-260-080		CAP,E 47-25 M 11L SME
	87-026-610-080	TR, KTC3198GR		C0035	87-010-380-080		CAP,E 47-16 M 11L SME
	87-A30-076-080	C-TR, 2SC3052F		C0036	87-010-381-080		CAP,E 330-16 M SME
	87-A30-075-080	C-TR, 2SA1235F		C0038	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-026-245-080	TR, DTC114ES		C0060	87-010-403-080		CAP,E 3.3-50 M 11L SME
	87-A30-198-080	TR, KTC3199GR		C0061	87-010-260-080		CAP,E 47-25 M 11L SME
	87-A30-107-070	C-TR, CMBT5401		C0101	87-010-183-080		C-CAP,S 2700P-50 K B GRM
	87-A30-106-040	C-TR, CMBT5551		C0102	87-010-183-080		C-CAP,S 2700P-50 K B GRM
	87-A30-087-080	C-FET, 2SK2158		C0103	87-010-545-080		CAP,E 0.22-50 M 11L SME
	87-A30-074-080	C-TR, RT1P 141C		C0104	87-010-545-080		CAP,E 0.22-50 M 11L SME
	87-A30-318-080	TR, CSA952K		C0107	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A30-091-080	FET, 2SJ460		C0108	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A30-329-080	TR, CD1585BC		C0111	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A30-090-080	FET, 2SK2541		C0112	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A30-104-080	C-TR, RT1N 441C		C0113	87-010-866-080		CAP,E 10-63 M VX
	87-A30-468-080	C-TR, KRC102S-RTK		C0114	87-010-866-080		CAP,E 10-63 M VX
	89-333-317-880	TR, 2SC3331 (T/U)		C0119	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	87-A30-269-040	C-FET, 2SJ461-T1		C0120	87-010-197-080		C-CAP,S 0.01-25 K B C2012
	89-327-143-080	C-TR, 2SC27140		C0125	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-489-080	C-TR, KRA107S		C0126	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-072-080	C-TR, RT1P 144C		C0127	87-012-368-080		C-CAP,S 0.1-50 Z F
	87-A30-086-070	C-TR, CSD1306E		C0128	87-012-368-080		C-CAP,S 0.1-50 Z F
	89-503-602-080	C-FET, 2SK360E		C0133	87-010-186-080		C-CAP,S 4700P-50 K B C2012
	87-A30-234-080	TR, CSC4115BC		C0140	87-010-182-080		C-CAP,S 2200P-50 K B C2012
				C0141	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C0203	87-010-182-080		C-CAP,S 2200P-50 K B C2012
				C0204	87-010-182-080		C-CAP,S 2200P-50 K B C2012
DIODE				C0205	87-012-140-080		C-CAP,S 470P-50 J CH
	87-A40-393-090	DIODE, 1N5402GW (F20)		C0206	87-012-140-080		C-CAP,S 470P-50 J CH
	87-020-465-080	DIODE, 1SS133		C0209	87-010-402-080		CAP,E 2.2-50 M 11L SME
	87-A40-547-090	DIODE, D5SBA20		C0210	87-010-402-080		CAP,E 2.2-50 M 11L SME
	87-A40-455-080	DIODE, RL203 GW		C0211	87-010-184-080		C-CAP,S 3300P-50 K B C2012
	87-A40-553-080	DIODE, 1N4003 LES		C0212	87-010-184-080		C-CAP,S 3300P-50 K B C2012
	87-A40-776-080	ZENER, UZ27BSD		C0213	87-010-402-080		CAP,E 2.2-50 M 11L SME
	87-A40-764-080	ZENER, UZ10BSC		C0214	87-010-402-080		CAP,E 2.2-50 M 11L SME
	87-A40-270-080	C-DIODE, MC2838		C0217	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A40-313-080	C-DIODE, MC2840		C0218	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A40-269-080	C-DIODE, MC2836		C0220	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A40-768-080	ZENER, UZ16BSA		C0223	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
	87-A40-752-080	ZENER, UZ6.2BSC		C0224	87-010-190-080		C-CAP,S 0.01-50 Z F C2012
	87-A40-802-080	ZENER, UZ5.1BSC		C0228	87-010-405-080		CAP,E 10-50 M 11L SME
	87-A40-739-080	ZENER, UZ2.7BSA		C0229	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-A40-618-080	VARI-CAP, SVC 348 (S/T)		C0230	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
	87-017-149-080	ZENER, HZS6A2L		C0231	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C0232	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C0239	87-010-196-080		C-CAP,S 0.1-25 Z F C2012
				C0301	87-010-178-080		C-CAP,S 1000P-50 K B C2012
MAIN C.B				C0302	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0003	87-012-368-080	C-CAP,S 0.1-50 Z F		C0303	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0004	87-012-368-080	C-CAP,S 0.1-50 Z F		C0304	87-010-178-080		C-CAP,S 1000P-50 K B C2012
C0005	87-012-368-080	C-CAP,S 0.1-50 Z F		C0307	87-010-263-080		CAP,E 100-10 M 11L SME
C0006	87-012-368-080	C-CAP,S 0.1-50 Z F		C0308	87-010-263-080		CAP,E 100-10 M 11L SME
C0009	87-012-368-080	C-CAP,S 0.1-50 Z F					

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0309	87-010-318-080	C-CAP,S	47P-50 J CH GRM	C0673	87-010-182-080	C-CAP,S	2200P-50 K B C2012
C0310	87-010-318-080	C-CAP,S	47P-50 J CH GRM	C0677	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0313	87-010-188-080	C-CAP,S	6800P-50 K B C2012	C0771	87-010-263-080	CAP,E	100-10 M 11L SME
C0314	87-010-188-080	C-CAP,S	6800P-50 K B C2012	C0772	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0315	87-010-263-080	CAP,E	100-10 M 11L SME	C0782	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0317	87-010-546-080	CAP,E	0.33-50 M 11L SME	C0783	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0318	87-010-546-080	CAP,E	0.33-50 M 11L SME	C0784	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0326	87-010-198-080	C-CAP,S	0.022-25 K B C2012	C0785	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0327	87-012-368-080	C-CAP,S	0.1-50 Z F	C0786	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0360	87-010-401-080	CAP,E	1-50 M 11L SME	C0788	87-010-149-080	C-CAP,S	5P-50 C CH GRM
C0399	87-012-140-080	C-CAP,S	470P-50 J CH	C0789	87-A11-532-080	C-CAP,S	0.022-50 J B
C0401	87-010-544-080	CAP,E	0.1-50 M 11L SME	C0790	87-A11-532-080	C-CAP,S	0.022-50 J B
C0402	87-010-544-080	CAP,E	0.1-50 M 11L SME	C0791	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0403	87-010-321-080	C-CAP,S	82P-50 J CH	C0792	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0404	87-010-321-080	C-CAP,S	82P-50 J CH	C0793	87-010-404-080	CAP,E	4.7-50 M 11L SME
C0405	87-010-197-080	C-CAP,S	0.01-25 K B C2012	C0795	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0406	87-010-197-080	C-CAP,S	0.01-25 K B C2012	C0796	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0407	87-010-197-080	C-CAP,S	0.01-25 K B C2012	C0797	87-010-405-080	CAP,E	10-50 M 11L SME
C0408	87-010-197-080	C-CAP,S	0.01-25 K B C2012	C0798	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0409	87-010-182-080	C-CAP,S	2200P-50 K B C2012	C0799	87-010-407-080	CAP,E	33-50 M 11L SME
C0410	87-010-182-080	C-CAP,S	2200P-50 K B C2012	C0800	87-012-369-080	C-CAP,S	0.047-50 Z F
C0411	87-010-405-080	CAP,E	10-50 M 11L SME	C0801	87-010-403-080	CAP,E	3.3-50 M 11L SME
C0412	87-010-405-080	CAP,E	10-50 M 11L SME	C0802	87-010-194-080	C-CAP,S	0.047-25 Z F
C0452	87-010-382-080	CAP,E	22-25 M 11L SME	C0803	87-010-198-080	C-CAP,S	0.022-25 K B C2012
C0453	87-010-183-080	C-CAP,S	2700P-50 K B GRM	C0804	87-010-263-080	CAP,E	100-10 M 11L SME
C0454	87-010-183-080	C-CAP,S	2700P-50 K B GRM	C0807	87-010-400-080	CAP,E	0.47-50 M 11L SME
C0455	87-010-183-080	C-CAP,S	2700P-50 K B GRM	C0808	87-010-401-080	CAP,E	1-50 M 11L SME
C0456	87-010-197-080	C-CAP,S	0.01-25 K B C2012	C0809	87-010-401-080	CAP,E	1-50 M 11L SME
C0458	87-010-178-080	C-CAP,S	1000P-50 K B C2012	C0810	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0459	87-010-175-080	C-CAP,S	560P-50 J SL	C0814	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0460	87-010-196-080	C-CAP,S	0.1-25 Z F C2012	C0815	87-010-400-080	CAP,E	0.47-50 M 11L SME
C0461	87-012-158-080	C-CAP,S	390P-50 J CH GRM	C0816	87-010-400-080	CAP,E	0.47-50 M 11L SME
C0462	87-012-158-080	C-CAP,S	390P-50 J CH GRM	C0821	87-010-405-080	CAP,E	10-50 M 11L SME
C0507	87-010-196-080	C-CAP,S	0.1-25 Z F C2012	C0823	87-010-177-080	C-CAP,S	820P-50 J SL C2012
C0508	87-010-178-080	C-CAP,S	1000P-50 K B C2012	C0824	87-010-405-080	CAP,E	10-50 M 11L SME
C0509	87-A10-300-080	CAP,M	0.027-50 J	C0825	87-010-596-080	C-CAP,S	0.047-16 K R C2012
C0510	87-A10-300-080	CAP,M	0.027-50 J	C0842	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0515	87-A10-300-080	CAP,M	0.027-50 J	C0844	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0516	87-A10-300-080	CAP,M	0.027-50 J	C0850	87-010-260-080	CAP,E	47-25 M 11L SME
C0518	87-010-196-080	C-CAP,S	0.1-25 Z F C2012	C0851	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0519	87-010-401-080	CAP,E	1-50 M 11L SME	C0852	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0520	87-010-401-080	CAP,E	1-50 M 11L SME	C0853	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0521	87-010-546-080	CAP,E	0.33-50 M 11L SME	C0858	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0522	87-010-546-080	CAP,E	0.33-50 M 11L SME	C0859	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0523	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0860	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0524	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0940	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0525	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0941	87-010-314-080	C-CAP,S	22P-50 J CH GRM
C0526	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0943	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0605	87-010-179-080	C-CAP,S	1200P-50 K B GRM	C0945	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0606	87-010-179-080	C-CAP,S	1200P-50 K B GRM	C0946	87-010-971-080	C-CAP,S	4700P-50 J B
C0609	87-010-213-080	C-CAP,S	0.015-25 K B GRM	C0947	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0610	87-010-213-080	C-CAP,S	0.015-25 K B GRM	C0948	87-010-148-080	C-CAP,S	4P-50 C CH GRM
C0611	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0952	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0612	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0953	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0613	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0954	87-010-400-080	CAP,E	0.47-50 M 11L SME
C0614	87-010-545-080	CAP,E	0.22-50 M 11L SME	C0956	87-010-263-080	CAP,E	100-10 M 11L SME
C0615	87-010-154-080	C-CAP,S	10P-50 D CH GRM	C0959	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0616	87-010-385-080	CAP,E	220-25 M SME	C0962	87-010-401-080	CAP,E	1-50 M 11L SME
C0617	87-010-385-080	CAP,E	220-25 M SME	C0963	87-015-785-080	C-CAP,	0.1-25 Z F C3216
C0618	87-010-405-080	CAP,E	10-50 M 11L SME	C0964	87-010-854-080	C-CAP,S	560P-50 J CH
C0620	87-010-263-080	CAP,E	100-10 M 11L SME	C0971	87-010-381-080	CAP,E	330-16 M SME
C0630	87-016-669-080	C-CAP,S	0.1-25 K B	C0972	87-010-404-080	CAP,E	4.7-50 M 11L SME
C0631	87-010-185-080	C-CAP,S	3900P-50 K B	C0973	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0632	87-010-185-080	C-CAP,S	3900P-50 K B	C0974	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0633	87-016-369-080	C-CAP,S	0.033-25 K B GRM	C0979	87-010-322-080	C-CAP,S	100P-50 J CH GRM
C0634	87-016-369-080	C-CAP,S	0.033-25 K B GRM	C0981	87-010-260-080	CAP,E	47-25 M 11L SME
C0661	87-010-178-080	C-CAP,S	1000P-50 K B C2012	C0982	87-010-196-080	C-CAP,S	0.1-25 Z F C2012
C0662	87-010-178-080	C-CAP,S	1000P-50 K B C2012	C0983	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0671	87-010-196-080	C-CAP,S	0.1-25 Z F C2012	C0984	87-010-197-080	C-CAP,S	0.01-25 K B C2012
C0672	87-010-196-080	C-CAP,S	0.1-25 Z F C2012	C0987	87-010-197-080	C-CAP,S	0.01-25 K B C2012



REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C0989	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0211	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
C0991	87-010-312-080	C-CAP,S 15P-50 J CH GRM		C0251	87-010-405-040	CAP,E 10-50 M 11L SME	
C0992	87-010-312-080	C-CAP,S 15P-50 J CH GRM		C0253	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
C0993	87-010-178-080	C-CAP,S 1000P-50 K B C2012		C0254	87-012-369-080	C-CAP,S 0.047-50 Z F	
C0995	87-010-178-080	C-CAP,S 1000P-50 K B C2012		C0255	87-010-560-040	CAP,E 10-50 M 5L MA	
C0997	87-010-196-080	C-CAP,S 0.1-25 Z F C2012		C0256	87-010-405-040	CAP,E 10-50 M 11L SME	
C0998	87-010-260-080	CAP,E 47-25 M 11L SME		C0259	87-010-405-040	CAP,E 10-50 M 11L SME	
C0999	87-A11-132-080	CAP,TC U 0.01-50 K B		C0264	87-A11-148-080	CAP,TC U 0.1-50 Z F	
CF0831	87-008-261-010	FLTR,CF SFE10.7MA5		C0273	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
CF0832	87-008-261-010	FLTR,CF SFE10.7MA5		C0274	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
CN0301	87-A60-620-010	CONN,3P V 2MM JMT		C0301	87-010-182-080	C-CAP,S 2200P-50 K B C2012	
CN0351	87-A60-625-010	CONN,8P V 2MM JMT		C0302	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
CN0601	87-099-719-010	CONN,30P H BLK TYK-B(X)		C0303	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
CN0602	87-A60-131-010	CONN,6P V FE		C0312	87-010-498-040	CAP,E 10-16 M 5L SRE	
CNA0001	8A-NF8-654-010	CONN ASSY,11P TID-A(480)		C0314	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
FFC0602	88-906-251-110	FF-CABLE,6P 1.25		C0315	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
FFE0831	A8-8ZA-190-030	8ZA-1 FEUMM		C0316	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
J0202	87-A60-483-010	JACK,DIA6.3 BLK ST W/S KM		C0321	87-012-393-080	C-CAP,S 0.22-16 K W5R CM/CB	
J0203	87-A60-238-010	TERMINAL,SP 4P (MSC)		C0322	87-010-400-040	CAP,E 0.47-50 M 11L SME	
J0204	87-A61-153-010	JACK,PIN 4P R/W(BL) (SEPA) KM		C0325	87-A10-189-040	CAP,E 220-10 M 5L	
J0602	87-A60-881-010	JACK,PIN 2P MSP 242V05 PBSN		C0326	87-A10-189-040	CAP,E 220-10 M 5L	
J0831	87-A60-202-010	TERMINAL,ANT 4P MSP-154V-02		C0332	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
J0940	87-A60-633-010	CONN,2P H 2.5MM JMT		C0334	87-010-312-080	C-CAP,S 15P-50 J CH GRM	
L0101	87-003-383-010	COIL,1UH K		C0335	87-012-140-080	C-CAP,S 470P-50 J CH	
L0102	87-003-383-010	COIL,1UH K		C0336	87-012-155-080	C-CAP,S 180P-50 J CH GRM	
L0201	87-003-383-010	COIL,1UH K		C0339	87-012-156-080	C-CAP,S 220P-50 J CH GRM	
L0202	87-003-383-010	COIL,1UH K		C0340	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
L0451	87-007-342-010	COIL,OSC 85KHZ BIAS		C0341	87-010-194-080	C-CAP,S 0.047-25 Z F	
L0801	87-A50-540-010	COIL,FM DET(TOK)		C0351	87-010-382-040	CAP,E 22-25 M 11L SME	
L0802	87-A91-552-010	FLTR,CFMT-450AL (TOK)		C0401	87-010-197-080	C-CAP,S 0.01-25 K B C2012	
L0811	87-005-847-080	COIL,2.2UH K CECS		C0451	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0832	87-005-847-080	COIL,2.2UH K CECS		C0452	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0941	87-A50-022-010	COIL,ANT SW (COI) 7.96MHZ		C0453	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0942	87-A50-550-010	COIL,OSC SW-2N(COI)		C0454	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0943	87-A50-522-080	COIL,1MH K CEC		C0455	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
L0944	87-A50-159-010	COIL,10MH K C2B		C0502	87-010-186-080	C-CAP,S 4700P-50 K B C2012	
L0952	87-A50-430-010	COIL,ANT MW(3BSW)		C0503	87-010-112-040	CAP,E 100-16 M 11L SME	
L0953	87-A50-431-010	COIL,OSC MW(3BSW)		C0504	87-010-405-040	CAP,E 10-50 M 11L SME	
R0129	87-A00-257-080	RES,M/F 0.15-1W J		C0505	87-010-545-040	CAP,E 0.22-50 M 11L SME	
R0130	87-A00-257-080	RES,M/F 0.15-1W J		C0506	87-010-320-080	C-CAP,S 68P-50 J CH GRM	
R0143	87-A00-440-050	RES,220-1/2W J RP		C0507	87-010-544-040	CAP,E 0.1-50 M 11L SME	
R0144	87-A00-440-050	RES,220-1/2W J RP		C0508	87-010-544-040	CAP,E 0.1-50 M 11L SME	
R0145	87-A00-440-050	RES,220-1/2W J RP		C0510	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
R0146	87-A00-440-050	RES,220-1/2W J RP		C0511	87-010-265-040	CAP,E 33-16 M 11L SME	
R0233	87-A00-258-080	RES,M/F 0.22-1W J		C0512	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
R0234	87-A00-258-080	RES,M/F 0.22-1W J		C0513	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
R0790	87-010-197-080	C-CAP,S 0.01-25 K B C2012		C0515	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
R0991	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0520	87-010-178-080	C-CAP,S 1000P-50 K B C2012	
R0993	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0602	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
R0995	87-010-322-080	C-CAP,S 100P-50 J CH GRM		C0603	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
SFR0451	87-A90-432-080	SFR,30K H NVZ6TLTA		C0604	87-010-322-080	C-CAP,S 100P-50 J CH GRM	
SFR0452	87-A90-432-080	SFR,30K H NVZ6TLTA		C0650	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
TC0941	87-011-254-080	TRIMMER,CER 20P 4.0X4.5 ECR		C0699	87-010-196-080	C-CAP,S 0.1-25 Z F C2012	
TC0943	87-011-253-080	TRIMMER,CER 30P 4.0X4.5 ECRLA		CN0101	87-099-720-010	CONN,30P BLK TYK-B(P)	
WH0001	87-A91-179-010	HLDR,WIRE 2.5-11P		CN0102	87-099-015-010	CONN,13P V BLK 6216	
X0991	87-A70-061-010	VIB,XTAL 4.500MHZ CSA-309		CN0301	87-A60-140-010	CONN,15P V FE	
FRONT C.B				FB0301	87-008-372-080	FLTR,EMI BL01 RN1	
				FB0501	87-008-372-080	FLTR,EMI BL01 RN1	
C0201	87-010-322-080	C-CAP,S 100P-50 J CH GRM		FFC0102	88-913-301-110	FF-CABLE,13P-1.25	
C0202	87-010-322-080	C-CAP,S 100P-50 J CH GRM		FFC0302	88-915-101-110	FF-CABLE, 15P 1.25 100MM	
C0203	87-010-322-080	C-CAP,S 100P-50 J CH GRM		FL0401	8A-NF8-601-010	FL,HNA-11MM30(ANF-8)	
C0204	87-010-322-080	C-CAP,S 100P-50 J CH GRM		J0501	87-A61-242-010	JACK,6.3 BLK MONO W/SW V KM	
C0205	87-010-322-080	C-CAP,S 100P-50 J CH GRM		L0331	87-A50-408-010	COIL,OSC 5.76MHZ	
				LED0311	87-A40-589-040	LED,SLR-56VCT31 RED	
				LED0601	87-A40-803-010	LED,SELULE10CKM-S LF38 BLUE	
C0206	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0602	87-A40-619-080	LED,SLR-56PT-TE7-W GRN	
C0207	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0603	87-A40-619-080	LED,SLR-56PT-TE7-W GRN	
C0208	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0604	87-A40-619-080	LED,SLR-56PT-TE7-W GRN	
C0209	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0606	87-A40-619-080	LED,SLR-56PT-TE7-W GRN	
C0210	87-010-322-080	C-CAP,S 100P-50 J CH GRM		LED0607	87-A40-619-080	LED,SLR-56PT-TE7-W GRN	

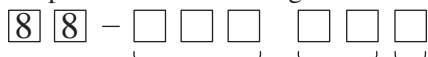


REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
LED0608	87-A40-619-080		LED,SLR-56PT-TE7-W GRN	△RY0001	87-A91-339-010		RELAY,AC DC12V G5PA-2
S0401	87-A91-024-180		SW,TACT KSHG611BT	△S0001	87-A90-165-010		SW,SL 1-2-3 SWS2301
S0402	87-A91-024-180		SW,TACT KSHG611BT	△T0001	87-A60-317-010		TERMINAL, 1P MSC
S0403	87-A91-024-180		SW,TACT KSHG611BT	△T0002	87-A60-317-010		TERMINAL, 1P MSC
S0404	87-A91-024-180		SW,TACT KSHG611BT	△W0001	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI
S0405	87-A91-024-180		SW,TACT KSHG611BT				
S0406	87-A91-024-180		SW,TACT KSHG611BT	DECK C.B			
S0407	87-A91-024-180		SW,TACT KSHG611BT	CON105	87-099-756-010		CONN,15P 9604 S F
S0408	87-A91-024-180		SW,TACT KSHG611BT	SFR1	87-024-581-010		SFR,3.3K DIA 6H
S0409	87-A91-024-180		SW,TACT KSHG611BT	SOL1	82-ZM1-618-410		SOL ASSY,27
S0410	87-A91-024-180		SW,TACT KSHG611BT	SOL2	82-ZM1-618-410		SOL ASSY,27
S0411	87-A91-024-180		SW,TACT KSHG611BT	SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
S0412	87-A91-024-180		SW,TACT KSHG611BT	SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
S0413	87-A91-024-180		SW,TACT KSHG611BT	SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
S0414	87-A91-024-180		SW,TACT KSHG611BT	SW4	87-036-110-010		SW,MICRO SPPB62
S0415	87-A91-024-180		SW,TACT KSHG611BT	SW5	87-036-110-010		SW,MICRO SPPB62
S0416	87-A91-024-180		SW,TACT KSHG611BT	SW6	87-036-110-010		SW,MICRO SPPB62
S0417	87-A91-024-180		SW,TACT KSHG611BT	SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
S0418	87-A91-024-180		SW,TACT KSHG611BT	SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
S0419	87-A91-024-180		SW,TACT KSHG611BT	W1	82-ZM3-601-010		RBN, CORD,4P-75
S0420	87-A91-024-180		SW,TACT KSHG611BT	HEAD-1 C.B			
S0425	87-A91-024-180		SW,TACT KSHG611BT	85-ZM3-602-010			PWB,FLEX A
S0426	87-A91-024-180		SW,TACT KSHG611BT	HEAD-2 C.B			
S0430	87-A91-024-180		SW,TACT KSHG611BT	85-ZM3-602-010			PWB,FLEX A
S0431	87-A91-024-180		SW,TACT KSHG611BT	CON351	87-NF6-616-010		CONN ASSY,8P-RPB
S0432	87-A91-024-180		SW,TACT KSHG611BT				
S0433	87-A91-024-180		SW,TACT KSHG611BT				
S0434	87-A91-024-180		SW,TACT KSHG611BT				
S0435	87-A91-024-180		SW,TACT KSHG611BT				
SW0252	87-A91-555-010		SW,RTRY EC12E24504				
SW0253	87-A91-542-010		SW,RTRY EC12E12504				
VR0501	86-NFA-607-010		VR,RTRY 10K15AX1 1 V XV0121PVN				
PT C.B							
C0001	87-010-387-080		CAP,E 470-25 M SME				
C0031	87-010-403-040		CAP,E 3.3-50 M 11L SME				
CN0001	87-A61-122-010		CONN,11P V TID-A				
△PT0001	8A-NF8-605-010		PT,ANF-8 LH				
△PT0002	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI				

## ○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

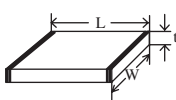
### Chip Resistor Part Coding



A  
抵抗部品コード  
Resistor Code

桁表示  
Figure  
抵抗値  
Value of resistor

## チップ抵抗 Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



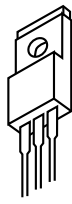
E C B

2SC3331  
CD1585  
CSA952  
CSC4115  
KTA1266  
KTC3198



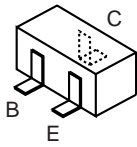
E C B

2SA933S  
DTC114ES  
KTC3199



B C E

2SB1370

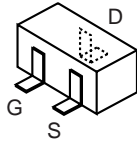


2SA1235  
2SC2714  
2SC3052  
CMBT5401  
CMBT5551  
CSD1306  
KRA107S  
KRC102S  
RT1N441C  
RT1P141C  
RT1P144C

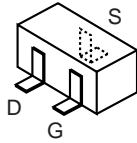


S D G

2SJ460  
2SK2541

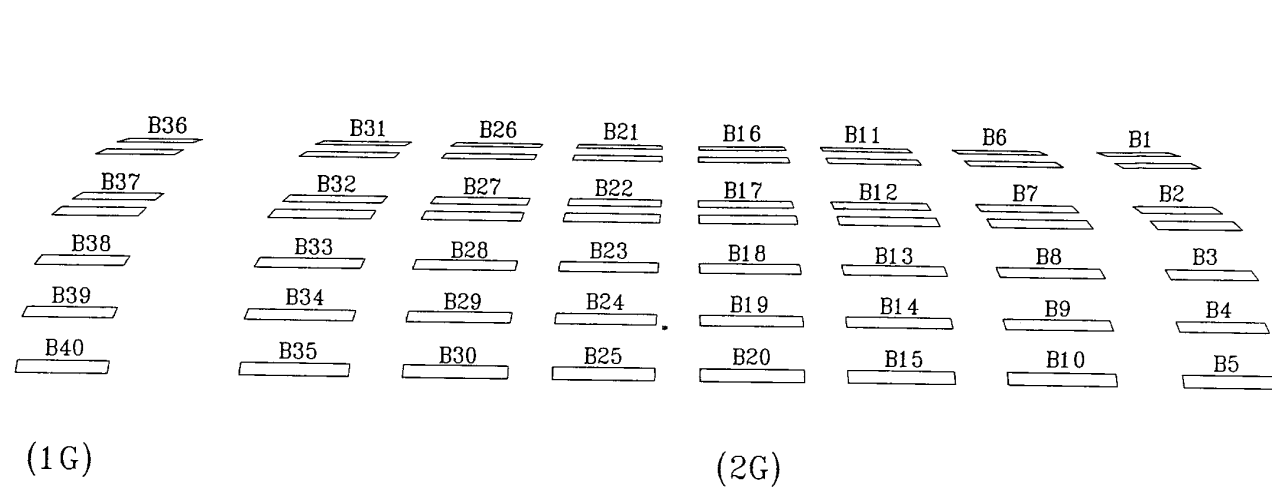
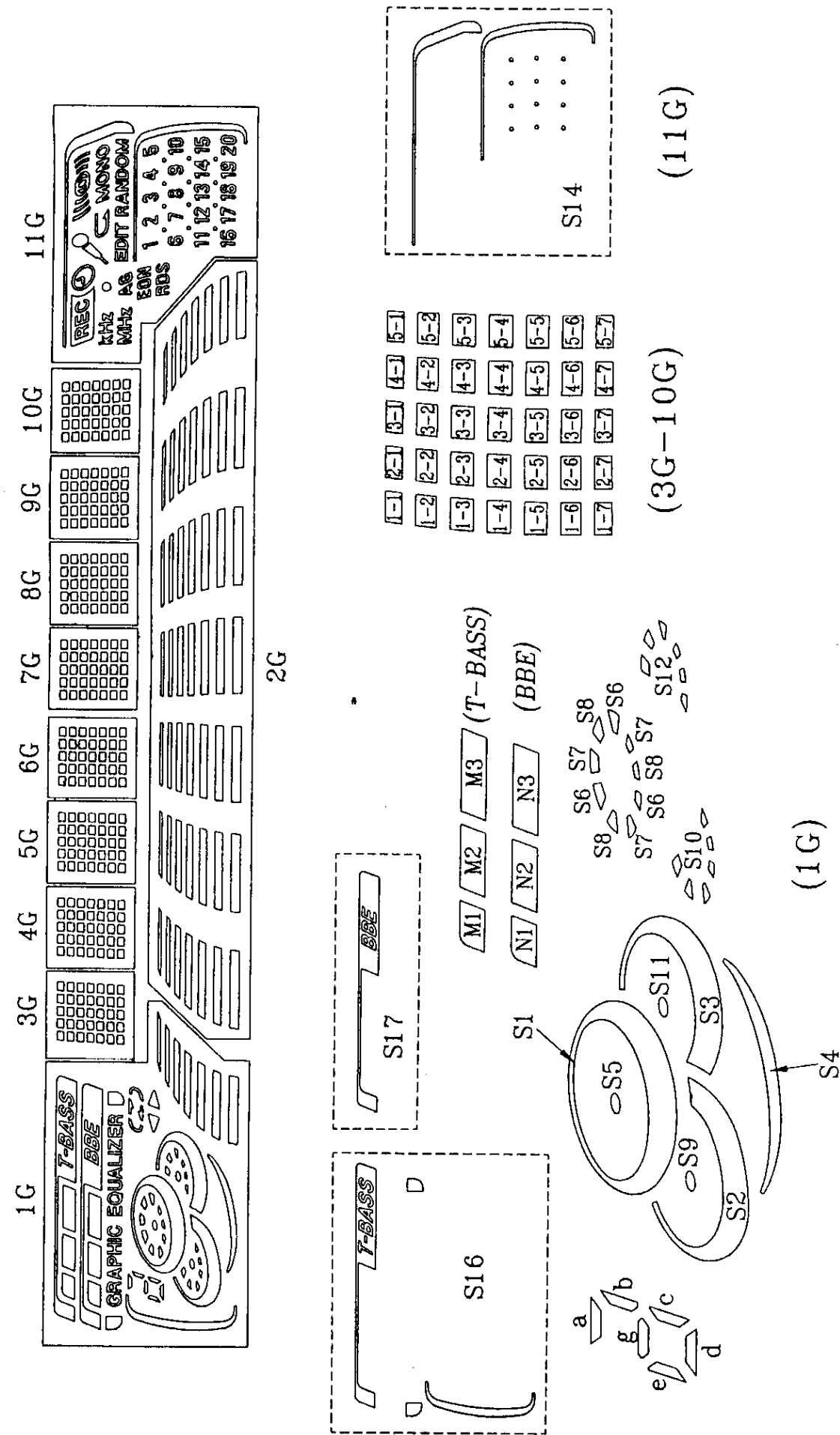


2SJ461  
2SK2158



2SK360

GRID ASSIGNMENT



ANODE CONNECTION

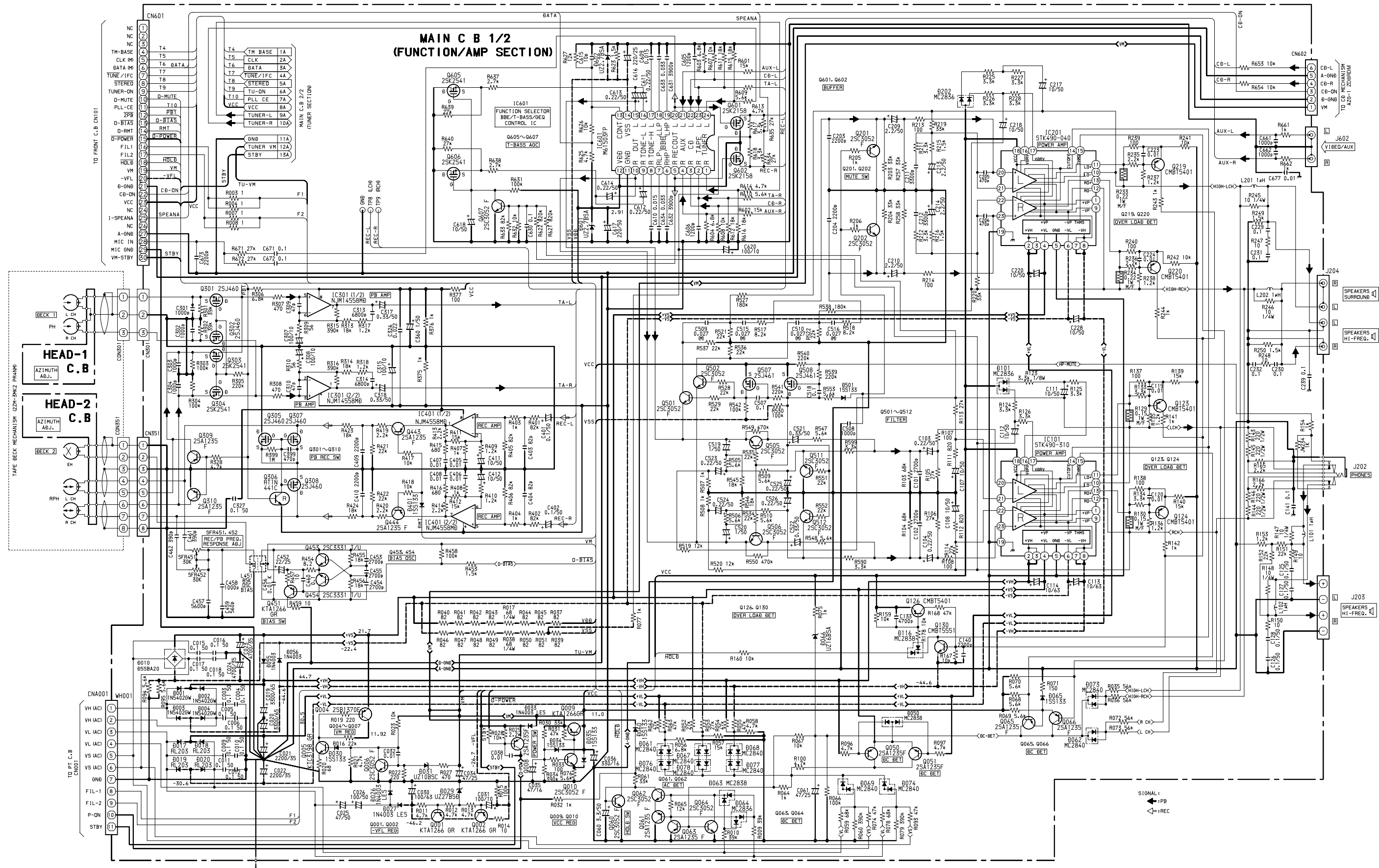
	1G	2G	3G-10G	11G
P1	S17	B35	1-1	
P2	N1	B30	2-1	MONO
P3	N2	B25	3-1	RANDOM
P4	N3	B20	4-1	
P5	GRAPHIC EQUALIZER	B15	5-1	EDIT
P6		B10	1-2	
P7		B5	2-2	REC
P8		B34	3-2	kHz
P9		B29	4-2	MHz
P10		B24	5-2	o
P11	S4	B19	1-3	AG
P12	S2	B14	2-3	EON
P13	S10	B9	3-3	RDS
P14	S9	B4	4-3	S14
P15	S3	B33	5-3	20
P16	S12	B28	1-4	19
P17	S11	B23	2-4	18
P18	S1	B18	3-4	17

	1G	2G	3G-10G	11G
P19	S6	B13	4-4	16
P20	S7	B8	5-4	15
P21	S8	B3	1-5	14
P22	S5	B32	2-5	13
P23	S16	B27	3-5	12
P24	M1	B22	4-5	11
P25	M2	B17	5-5	10
P26	M3	B12	1-6	9
P27	e	B7	2-6	8
P28	a, g, d	B2	3-6	7
P29	b	B31	4-6	6
P30	c	B26	5-6	5
P31	B40	B21	1-7	4
P32	B39	B16	2-7	3
P33	B38	B11	3-7	2
P34	B37	B6	4-7	1
P35	B36	B1	5-7	



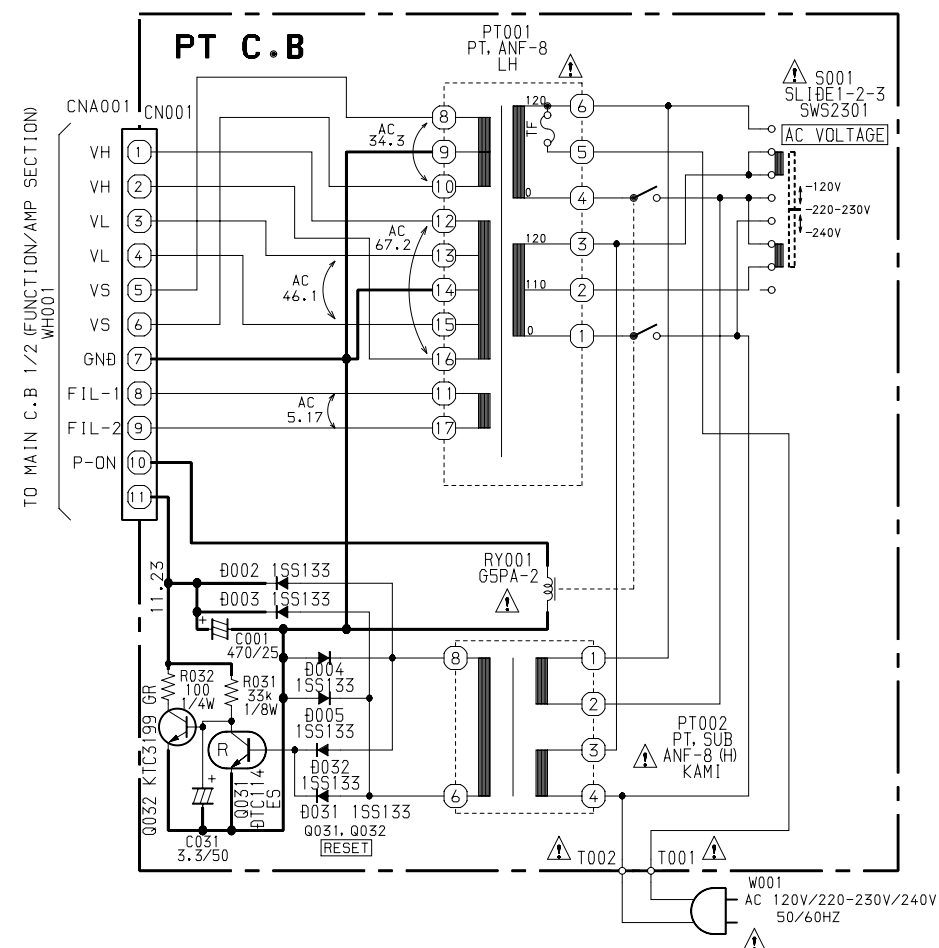


### SCHEMATIC DIAGRAM-1 (FUNCTION/AMP SECTION)

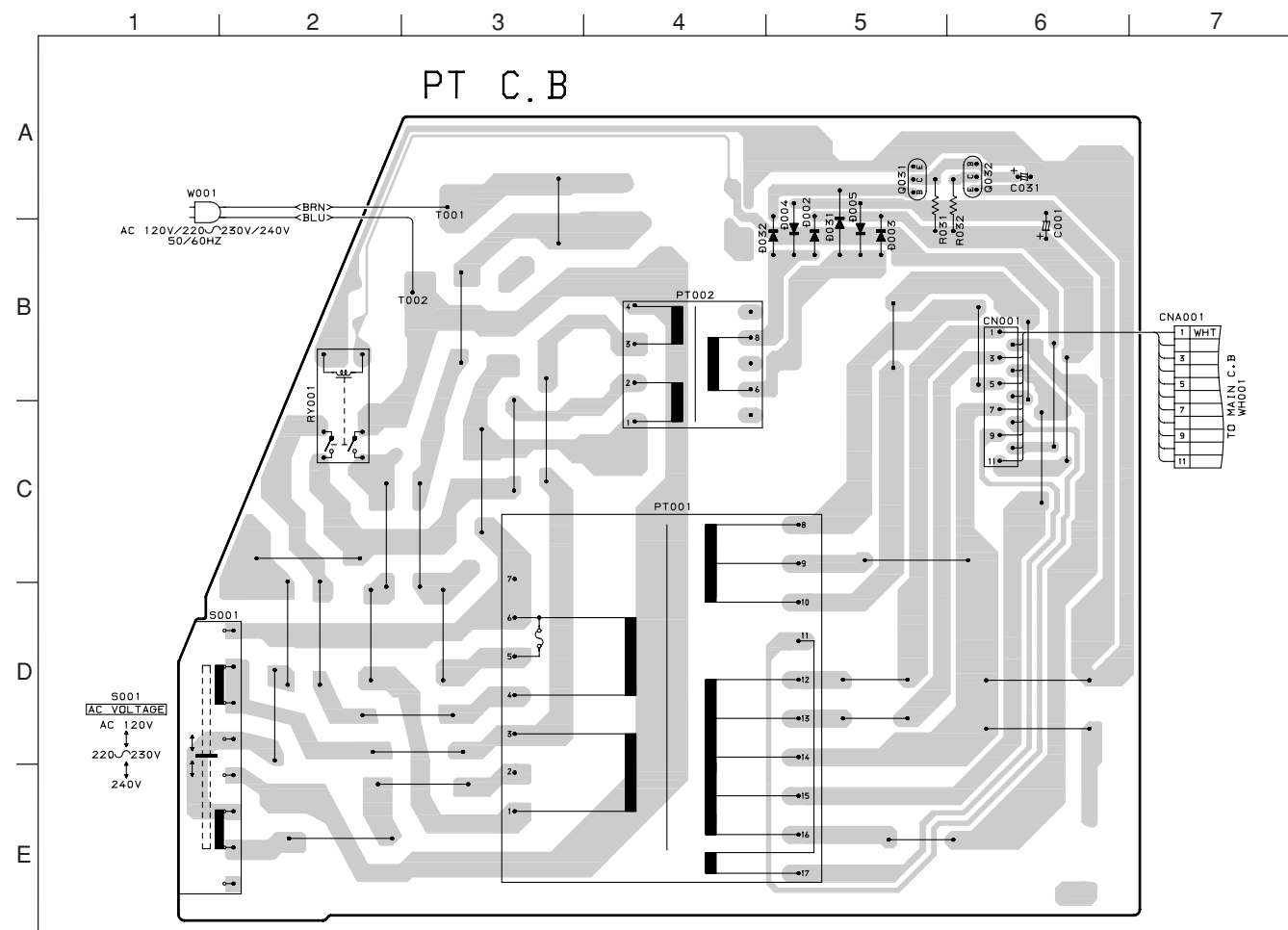




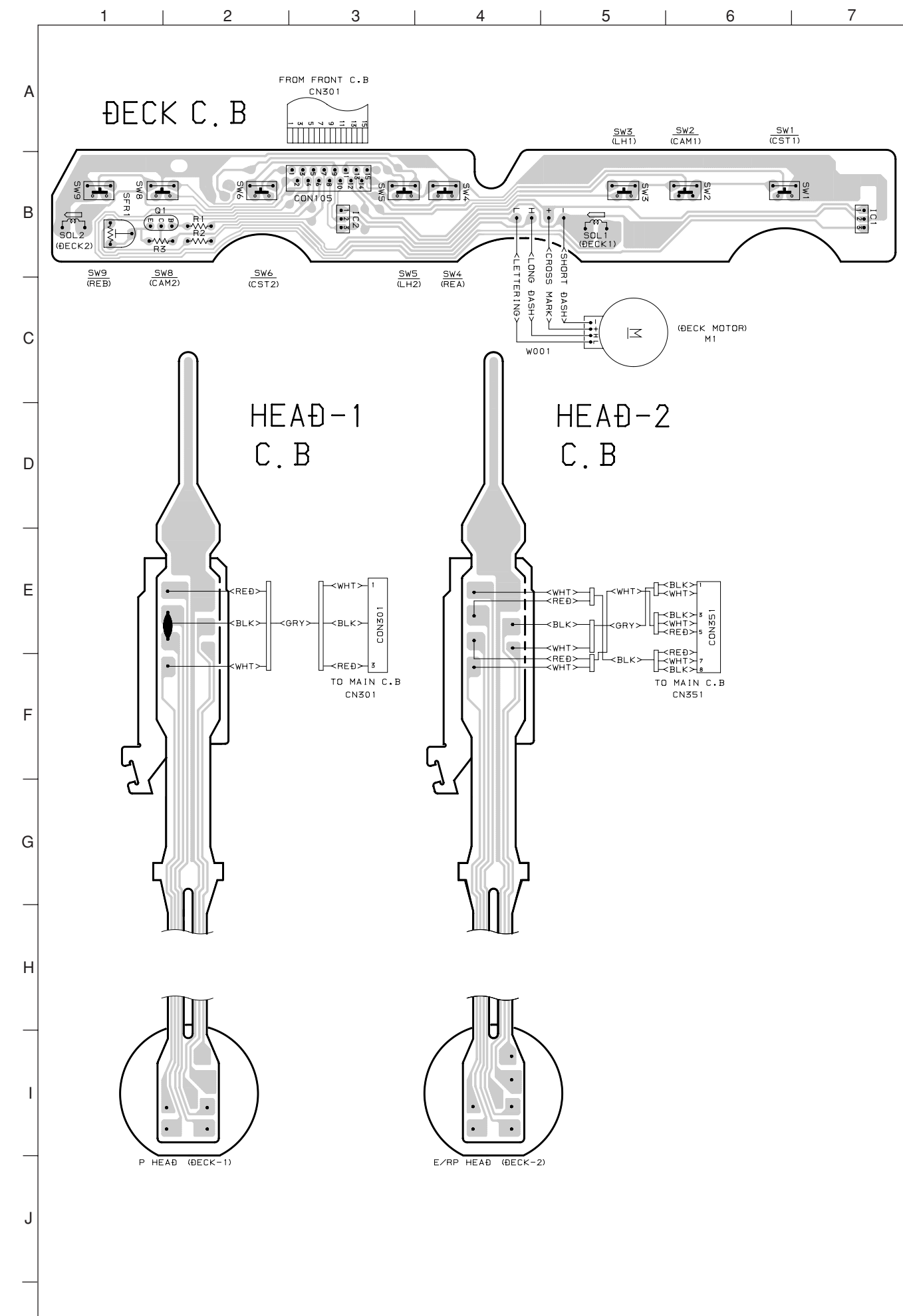
SCHEMATIC DIAGRAM-3 (PT SECTION)



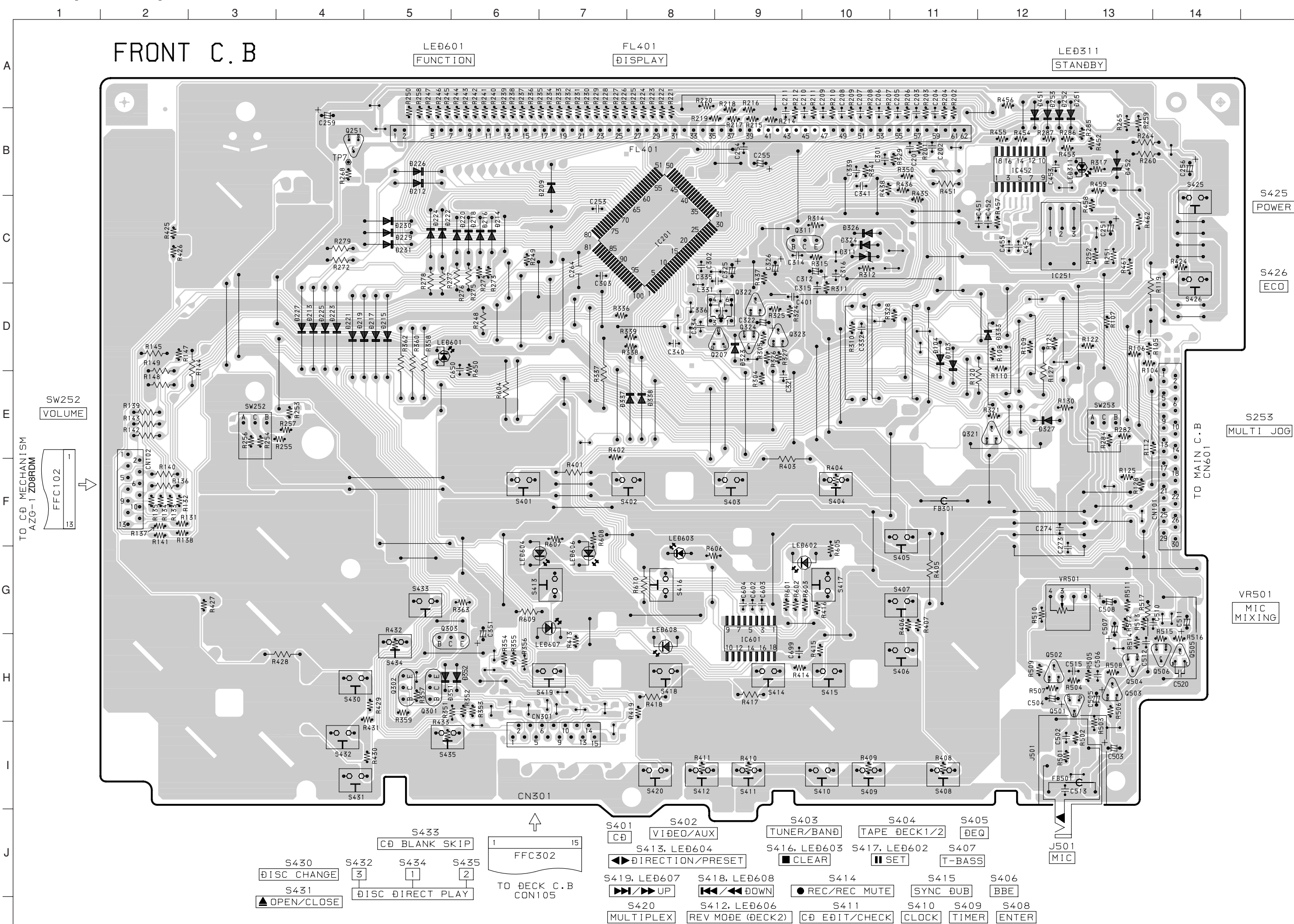
WIRING-2 (PT C.B)



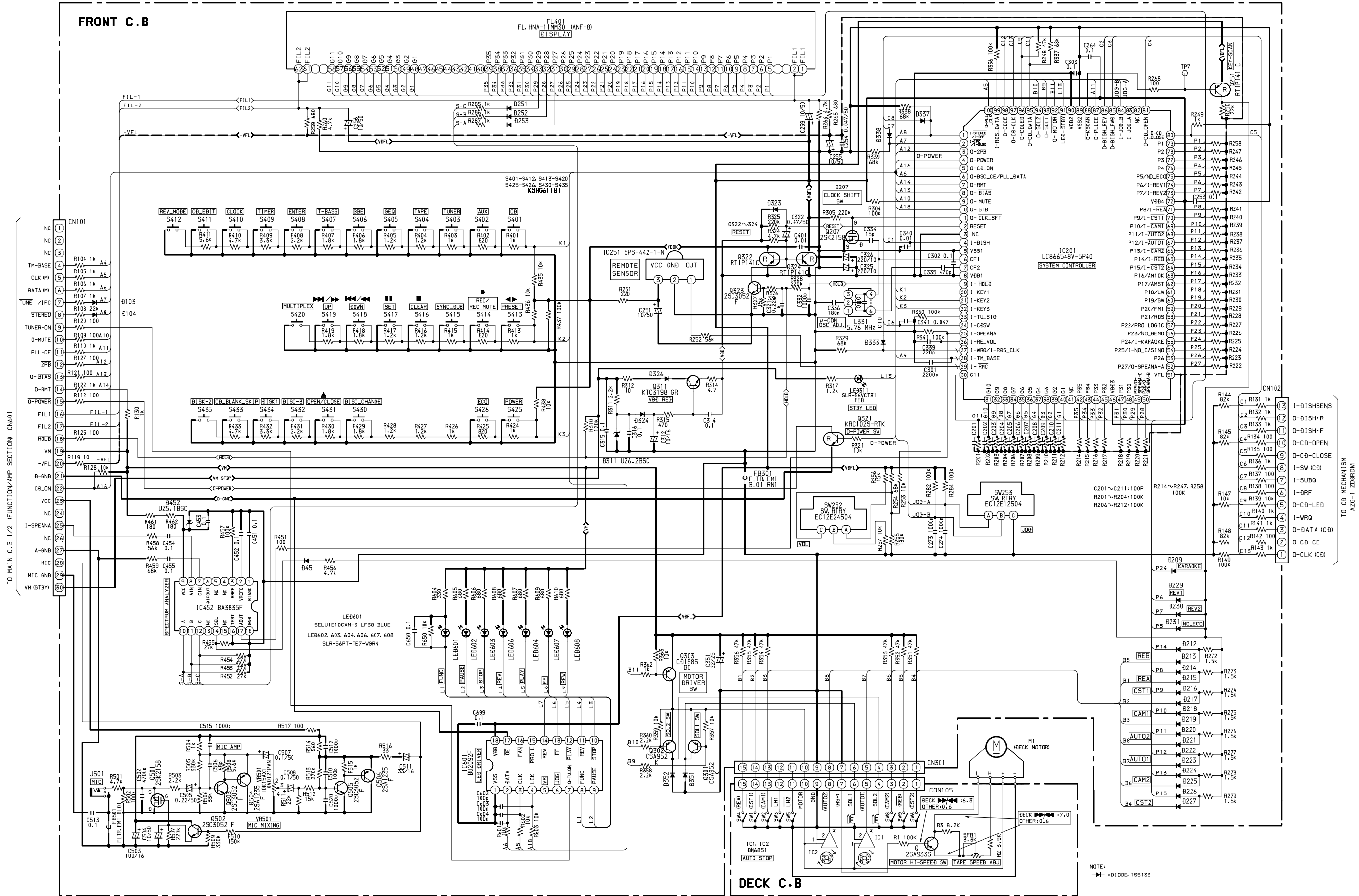
WIRING-3 (DECK C.B)





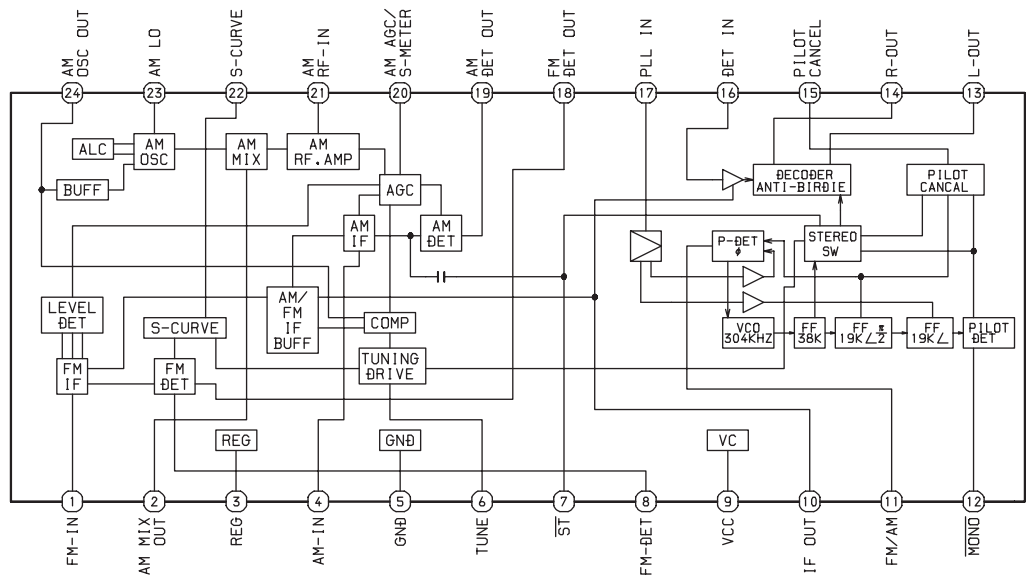


SCHEMATIC DIAGRAM-4 (FRONT SECTION)

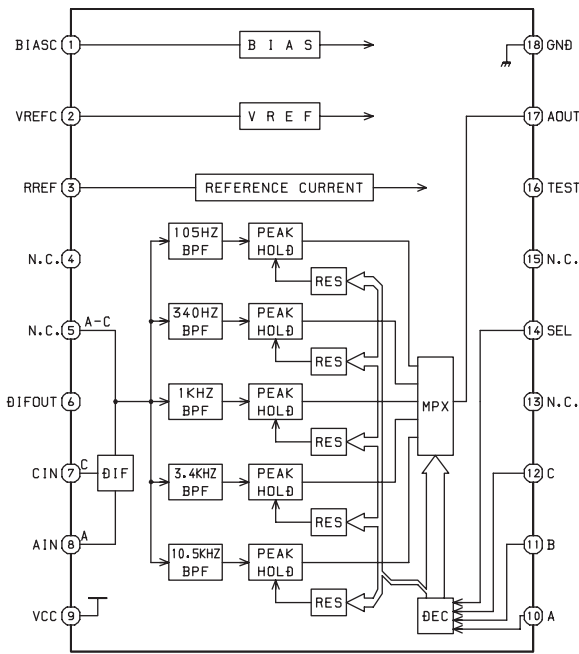


IC BLOCK DIAGRAM

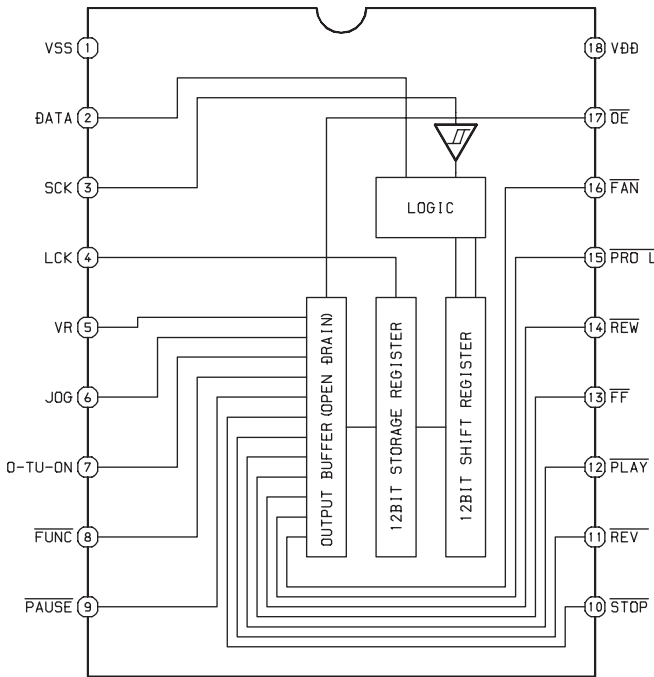
IC, LA1843



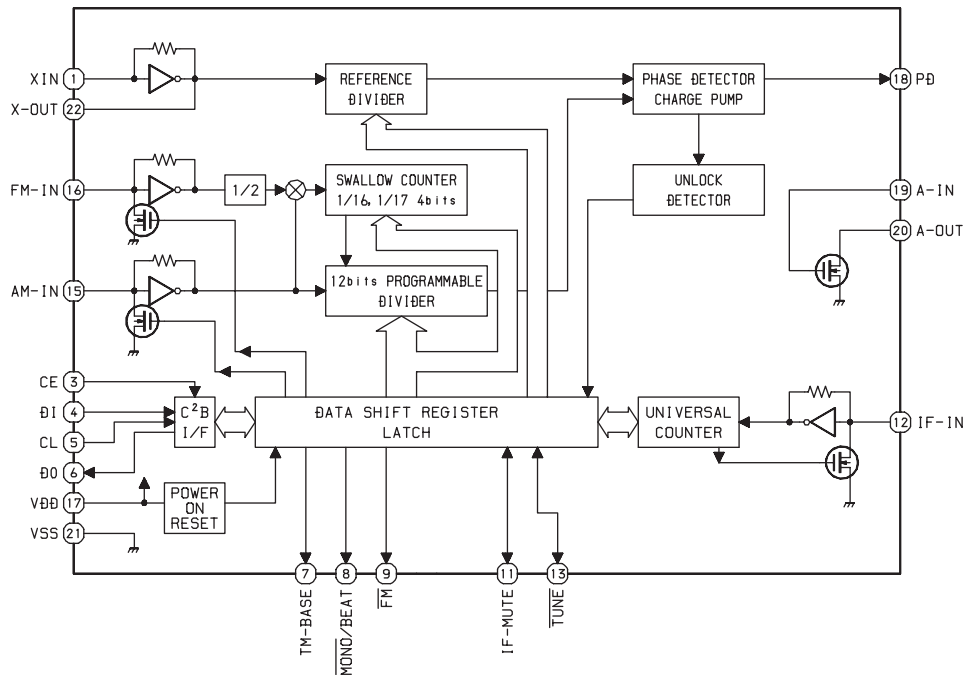
IC, BA3835F



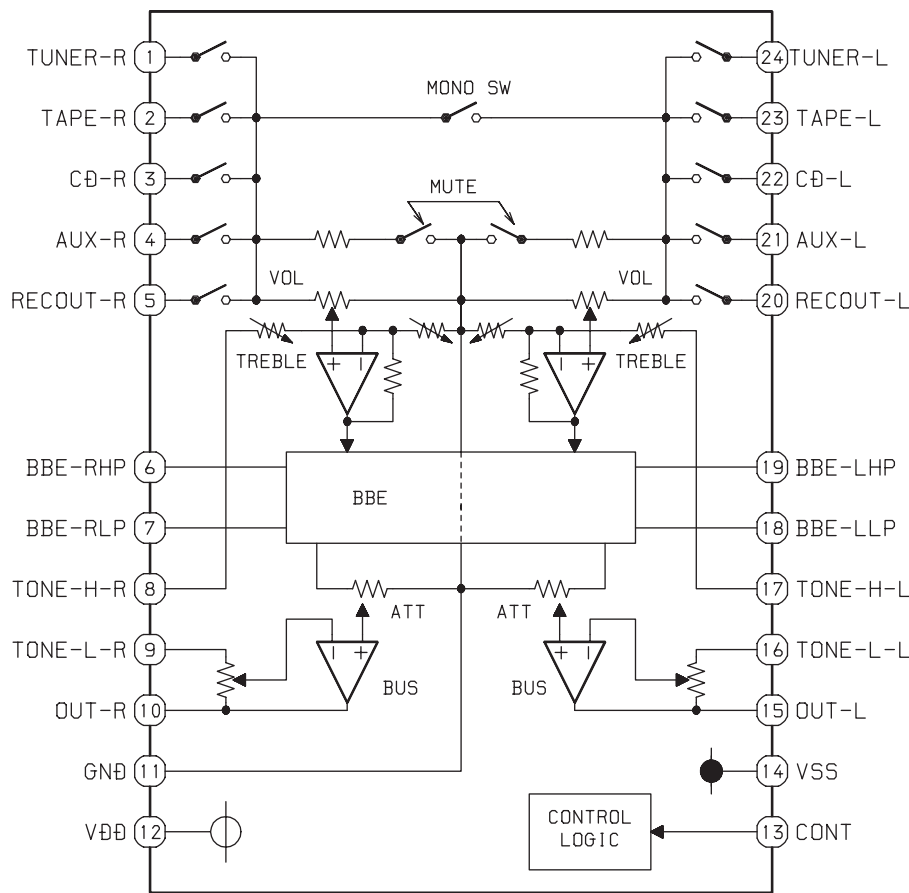
IC, BU2092F



IC, LC72131D

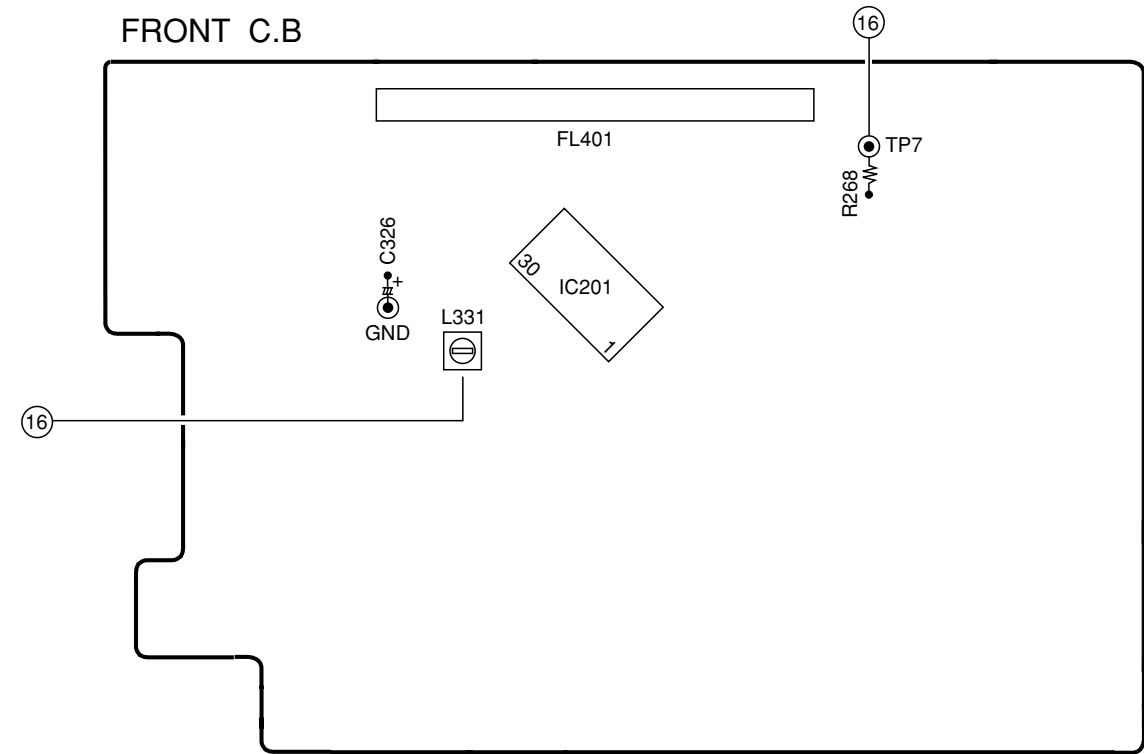
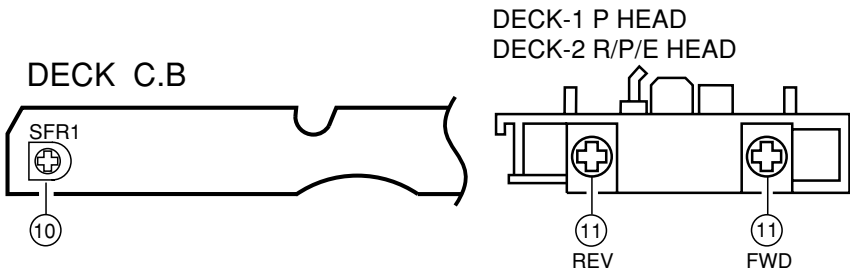
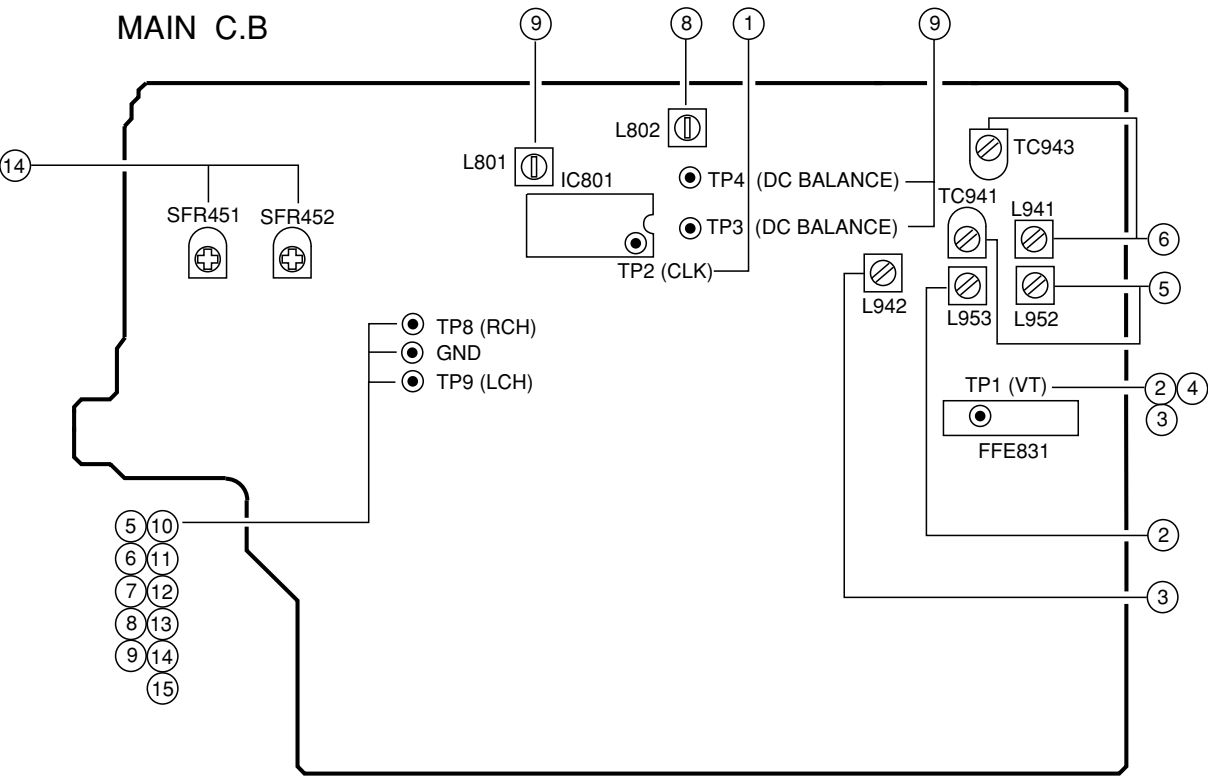


IC, M61503FP





ADJUSTMENT



< TUNER SECTION >

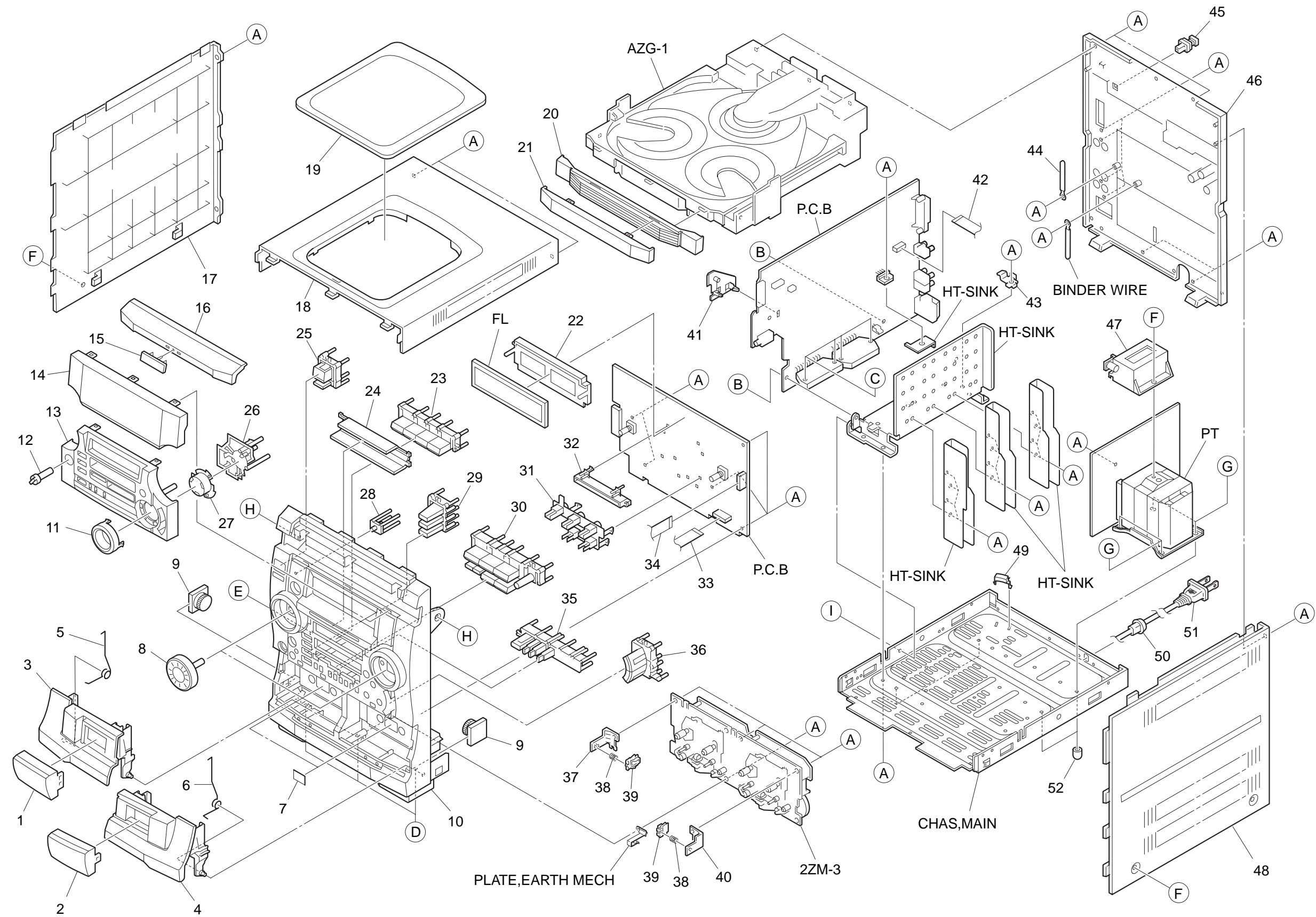
1. Clock frequency Check  
Settings : • Test point : TP2  
Method : Set to WM 1602kHz and check that the test point is 2052kHz  $\pm$  45Hz.
2. MW VT Adjustment  
Settings : • Test point : TP1 (VT)  
• Adjustment location : L953  
Method : Set to MW 1710kHz, 530kHz and adjust L953 so that the test point is 8.0V  $\pm$  0.05V (1710kHz) and more than 0.3V (530kHz).
3. SW VT Adjustment  
Settings : • Test point : TP1 (VT)  
• Adjustment location : L942  
Method : Set to SW 17.9MHz, 5.73MHz and adjust L942 so that the test point is 8.0V  $\pm$  0.05V (17.9MHz) and more than 0.3V (5.73MHz).
4. FM VT Check  
Settings : • Test point : TP1 (VT)  
Method : Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).
5. MW Tracking Adjustment  
Settings : • Test point : TP8(Lch), TP9(Rch)  
• Adjustment location :  
L952 ..... 603kHz  
TC941 ..... 1404kHz  
Method : Set to MW 603kHz and adjust L952 so that the level at the test point becomes maximum.  
Next, set to MW 1404kHz and adjust TC941 so that the level at the test point becomes maximum.
6. SW Tracking Adjustment  
Settings : • Test point : TP8(Lch), TP9(Rch)  
• Adjustment location :  
L941 ..... 5.9MHz  
TC943 ..... 17.9Mhz  
Method : Set to SW 5.9MHz and adjust L941 so that the level at the test point becomes maximum.  
Next, set to SW 17.9MHz and adjust TC943 so that the level at the test point becomes maximum.
7. FM Tracking Check  
Settings : • Test point : TP8(Lch), TP9(Rch)  
Method : Set to FM 98.0MHz and check that the test point is less than 9dB $\mu$ V.
8. AM(MW) IF Adjustment  
Settings : • Test point : TP8(Lch), TP9(Rch)  
• Adjustment location :  
L802 ..... 1000kHz
9. DC Balance / Mono Distortion Adjustment  
Settings : • Test point : TP3, TP4 (DC Balance)  
: TP8(Lch), TP9(Rch) (Distortion)  
• Adjustment location : L801  
• Input level : 60dB $\mu$ V  
Method : Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V  $\pm$  0.3V.  
Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 2)  
Settings : • Test tape : TTA-100  
• Test point : TP8(Lch), TP9(Rch)  
• Adjustment location : SFR1  
Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz  $\pm$  5Hz and  $\pm$ 45Hz (REV) with respect to forward speed.
11. Head Azimuth Adjustment (DECK 1, DECK 2)  
Settings : • Test tape : TTA-330  
• Test point : TP8(Lch), TP9(Rch)  
• Adjustment location : Head azimuth adjustment screw  
Method : Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum. Next, perform on REV PLAY mode.
12. PB Frequency Response Check (DECK 1, DECK 2)  
Settings : • Test tape : TTA-300  
• Test point : TP8(Lch), TP9(Rch)  
Method : Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 5dB.
13. PB Sensitivity Check (DECK 1, DECK 2)  
Settings : • Test tape : TTA-200  
• Test point : TP8(Lch), TP9(Rch)  
Method : Play back the test tape and check that the output level of the test point is 140mV  $\pm$  3dB.
14. REC/PB Frequency Response Adjustment (DECK 2)  
Settings : • Test tape : TTA-602  
• Test point : TP8(Lch), TP9(Rch)  
• Input signal : 1kHz / 8kHz (LINE IN)  
• Adjustment location : SFR451 (Lch)  
SFR452 (Rch)  
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the TP8, TP9 becomes -20VU. Record and play back the 1kHz and 8kHz signals and adjust SFRs so that the output of the 8kHz signals becomes 0dB  $\pm$  0.5dB with respect to that of the 1kHz signal.
15. REC/PB Sensitivity Check (DECK 2)  
Settings : • Test tape : TTA-602  
• Test point : TP8(Lch), TP9(Rch)  
• Input signal : 1kHz (LINE IN)  
Method : Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB  $\pm$  3.0dB.

< FRONT SECTION >

16.  $\mu$ -CON OSC Adjustment  
Settings : • Test point : TP7 and GND  
• Adjustment location : L331  
Method : Insert AC plug while pressing POWER and TUNER function keys. Adjust L331 so that the frequency at the test point is 153.84Hz  $\pm$  0.15Hz.



## MECHANICAL MAIN PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NF8-014-010		WINDOW, CASS 1	36	8A-NF8-029-110		KEY, OPEN
2	8A-NF8-015-010		WINDOW, CASS 2	37	87-NF4-216-010		HLDR, LOCK 1
3	8A-NF8-042-010		BOX, CASS 1H	38	86-NF9-224-010		SPR-C, LOCK
4	8A-NF8-043-010		BOX, CASS 2H	39	82-NF5-229-010		PLATE, LOCK
5	82-NF5-218-010		SPR-T, EJECT 1 (SIN)	40	87-NF4-217-110		HLDR, LOCK 2
6	82-NF5-219-010		SPR-T, EJECT 2 (SIN)	41	8A-NF8-206-010		HLDR, PWB M
7	81-532-080-010		LABEL, CASS. COMPT	42	88-906-251-110		FF-CABLE, 6P 1.25
8	8A-NF8-019-010		KNOB, RTRY JOG	43	8A-NF8-205-010		HLDR, IC
9	8Z-NF6-210-010		DMPR, 150 N	44	87-064-185-010		HLDR, WIRE
10	8A-NF8-001-010		CABI, FR U	45	84-ZG1-245-210		CAP, OPTICAL
11	8A-NF8-034-010		PANEL, DIRECT	46	8A-NF8-078-010		CABI, REAR HRJSM
12	8A-NF8-030-110		KNOB, RTRY MIC	47	8A-DB8-209-010		HLDR, PWB PT
13	8A-NF8-044-010		PANEL, FR H	48	8A-NF8-008-010		PANEL, RIGHT V-2
14	8A-NF8-046-010		WINDOW, DISP H	49	87-NF4-221-010		HLDR, CABLE
15	87-CE3-023-010		BADGE, AIWA 30N SILV	50	87-085-185-010		BUSHING, AC CORD (E)
16	8A-NF8-009-110		PANEL, CD	51	87-A80-157-010		AC CORD ASSY, E BLK CC
17	8A-NF8-007-010		PANEL, LEFT V-2	52	8Z-NB8-240-010		COVER, PL
18	8A-NF8-005-010		PANEL, TOP	A	87-067-703-010		TAPPING SCREW, BVT2+3-10
19	8A-NF8-006-010		WINDOW, TOP	B	87-NF4-224-010		S-SCREW, IT3B+3-8 CU
20	8A-NF8-010-010		PANEL, TRAY	C	87-067-581-010		TAPPING SCREW, BVT2+3-15
21	8A-NF8-011-010		WINDOW, TRAY	D	87-067-688-010		BVTT+3-6
22	88-NF8-205-010		GUIDE, FL	E	87-723-096-410		QT2+3-10W/O SLOT BL
23	8A-NF8-020-010		KEY, FUN	F	87-067-641-010		UTT2+3-8 (W/O SLOT) BL
24	8A-NF8-018-110		REFLECTOR, FUN	G	87-078-191-010		S-SCREW, IT+4-10
25	8A-NF8-016-010		KEY, POWER	H	87-721-097-410		QT2+3-12 GLD
26	8A-NF8-031-110		KEY, DISC	I	87-721-096-410		QT2+3-10 W/O SLOT
27	8A-NF8-032-010		CAP, DISC				
28	8A-NF8-017-010		REFLECTOR, ECO				
29	8A-NF8-022-010		KEY, GEQ				
30	8A-NF8-036-110		KEY, ASSY OPE REV				
31	8A-NF8-203-010		GUIDE, OPE REV				
32	8A-NF8-201-010		GUIDE, FUN				
33	88-915-101-110		FF-CABLE, 15P 1.25 100MM				
34	88-913-301-110		FF-CABLE, 13P-1.25				
35	8A-NF8-037-110		KEY, CD EDIT H				

## COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

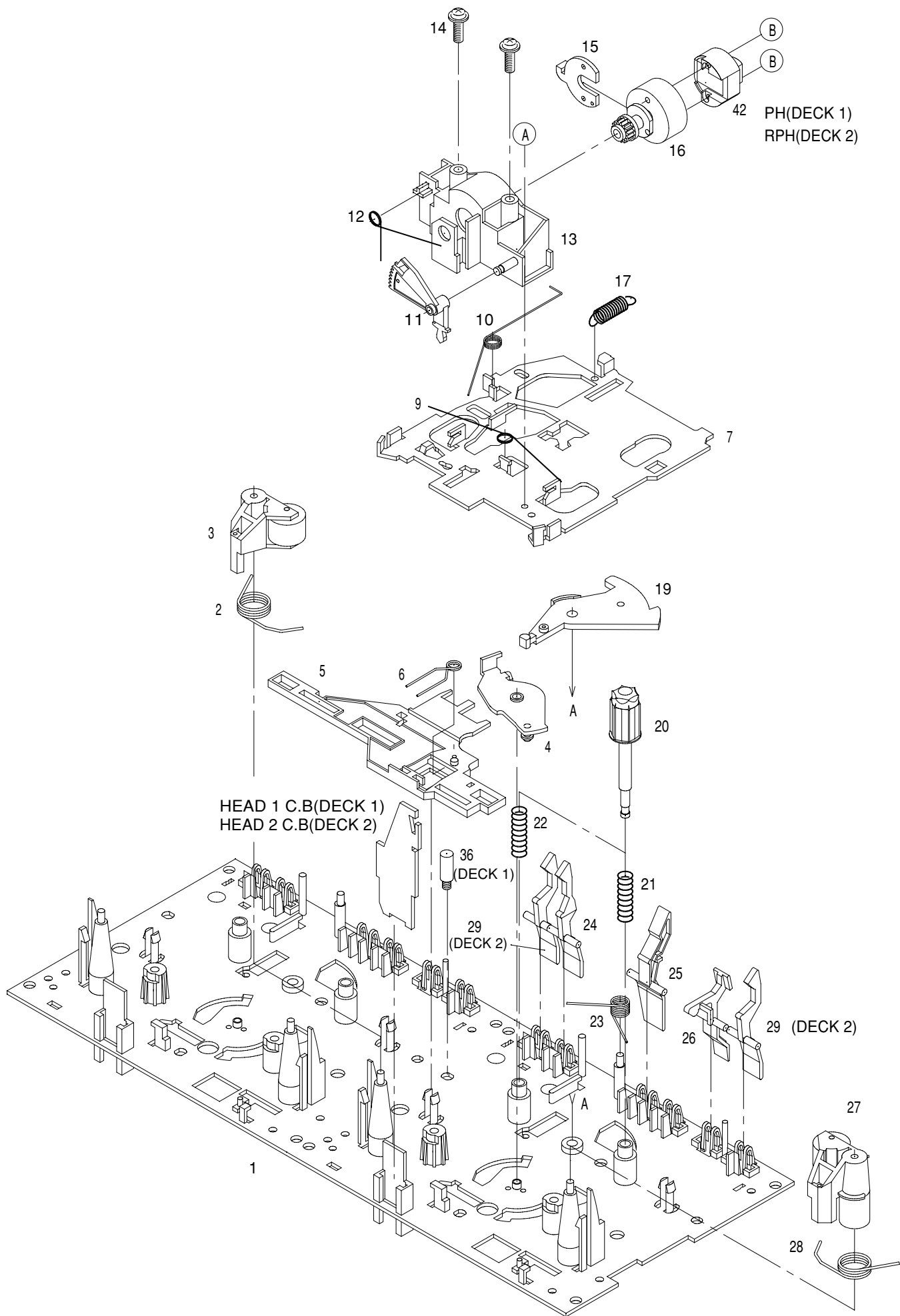
## TAPE MECHANISM MAIN PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

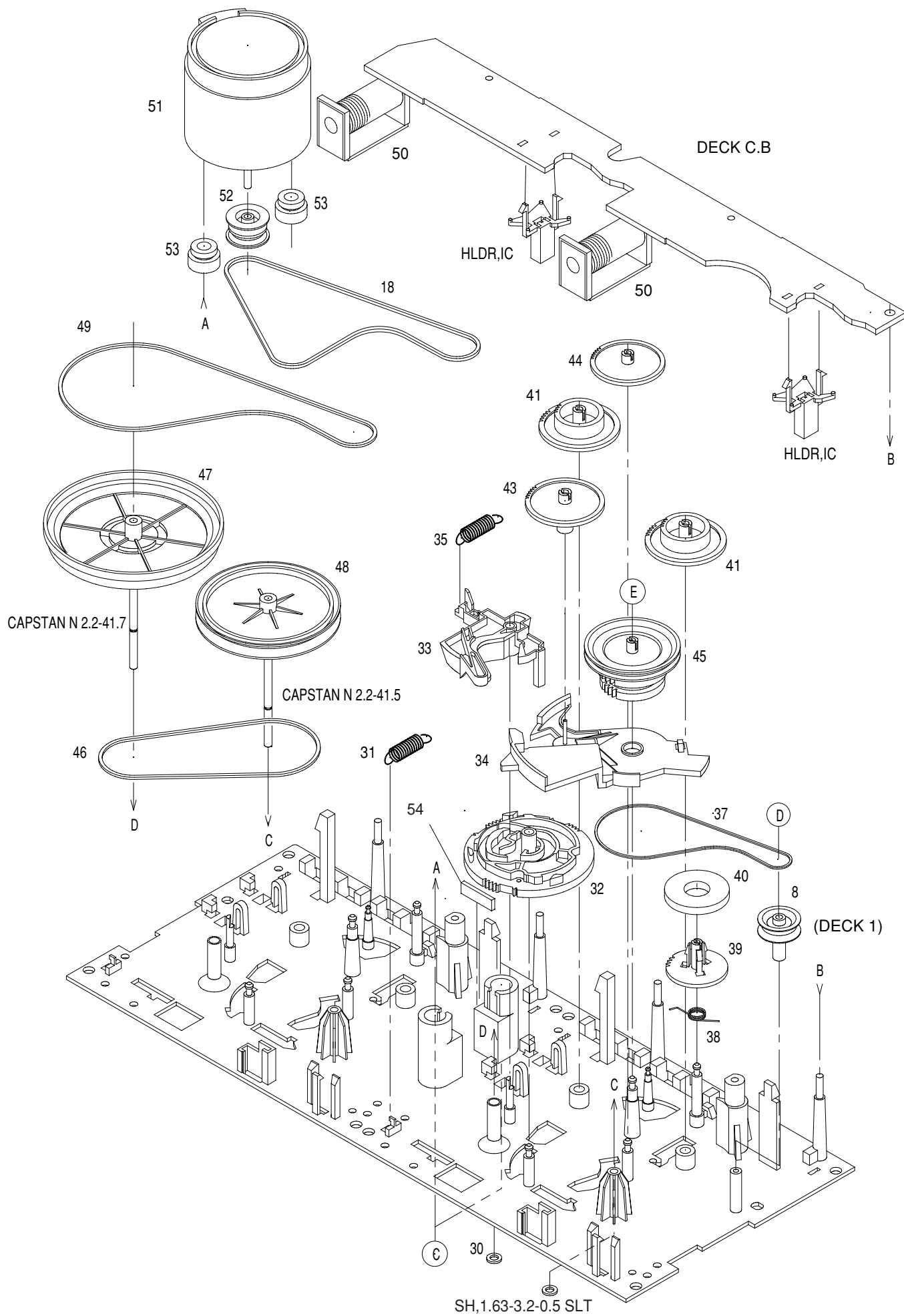
REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-610	1H	CHAS ASSY,M2	31	82-ZM1-255-310	0E	SPR-E,LVR DIR
2	82-ZM1-258-210	0E	SPR-T,PINCH L	32	82-ZM3-305-210	0E	GEAR,CAM M2
3	82-ZM1-341-210	1A	LVR ASSY,PINCH L2	33	82-ZM1-227-310	0E	LVR,TRIG
4	82-ZM1-333-210	0E	PLATE,LINK2	34	82-ZM3-306-110	0E	LVR,FR M2
5	82-ZM1-266-310	0E	LVR,DIR	35	82-ZM1-265-310	0E	SPR-E,TRIG
6	82-ZM1-214-010	0E	SPR-T,DIR	36	82-ZM3-339-110	0E	SHAFT,COUPLER N3
7	82-ZM1-206-910	1A	CHAS,HEAD	37	86-ZM1-206-010	0E	BELT,MAIN L
8	82-ZM3-335-310	0E	PULLEY,COUPLER M3	38	82-ZM1-322-010	0E	SPR-T,FR 60
9	82-ZM1-269-210	0E	SPR-T,BRG	39	82-ZM1-220-210	0E	GEAR,IDLER
10	82-ZM1-219-110	0E	SPR-T,LINK	40	82-ZM3-616-010	0E	RING MAGNET 4
11	82-ZM1-210-110	0E	GEAR,H T	41	82-ZM1-216-410	0E	GEAR,REEL
12	82-ZM1-213-010	0E	SPR-T,HEAD	42	87-A90-820-010	1D	HEAD,PH HADKH25 FPC
13	82-ZM1-207-910	1A	GUIDE,TAPE	42	87-A90-821-010	1H	HEAD,RPH HADKH56 FPC
14	86-ZM4-206-010	0E	S-SCREW,AZIMUTH L	43	82-ZM1-225-210	0E	GEAR,FR
15	82-ZM1-314-110	0E	PLATE,HEAD	44	82-ZM1-226-010	0E	GEAR,REW
16	82-ZM1-208-310	0E	HLDR,HEAD	45	82-ZM3-333-310	1A	SLIP DISK ASSY 2
17	82-ZM1-218-010	0E	SPR-E,HB	46	82-ZM1-338-110	0E	BELT,FR 4
18	82-ZM3-342-010	0E	BELT,SBU MOT 3	47	82-ZM1-237-610	1A	FLY-WHL ASSY,RW
19	82-ZM1-222-210	0E	LVR,PLAY	47	82-ZM1-234-310	0E	FLY-WHL,L ASSY
20	82-ZM1-217-410	0E	REEL TABLE	48	09-001-420-010	1A	FLY-WHL,R ASSY
21	82-ZM1-244-510	0E	SPR-C,BT	49	82-ZM3-329-410	0E	BELT,SBU R2
22	82-ZM1-285-410	0E	SPR-C,BT L	50	82-ZM1-618-410	1B	SOL ASSY,27
23	82-ZM1-257-010	0E	SPR-T,CAS	51	87-045-347-010	1H	MOT,SHU2L 70
24	82-ZM1-241-310	0E	LVR,MC	52	82-ZM3-221-210	0E	PULLEY,MOT 2M
25	82-ZM1-242-010	0E	LVR,CAS	A	85-ZM3-202-010	0E	S-SCREW,TG
26	82-ZM1-243-010	0E	LVR,STOP	B	80-ZM6-207-010	0E	V+1.6-7
27	82-ZM1-344-010	0E	LVR ASSY,PINCH R2	C	82-ZM3-318-110	0E	S-SCREW W,MOTOR M2
28	82-ZM1-259-210	0E	SPR-T,PINCH R	D	87-B10-043-010	0E	W-P,0.99-4-0.25 SLT
29	82-ZM1-240-110	0E	LVR,REC(*)	E	82-ZM3-334-010	0E	PW 2.16-6-0.4
30	80-ZM6-243-010	0E	SH 1.75-3.6-0.5 SLT	53	82-ZM3-307-010		CUSH-G, 3.7-8-3.2
				54	82-ZM3-340-010		SH,BELT D2



# TAPE MECHANISM EXPLDED VIEW 1/2



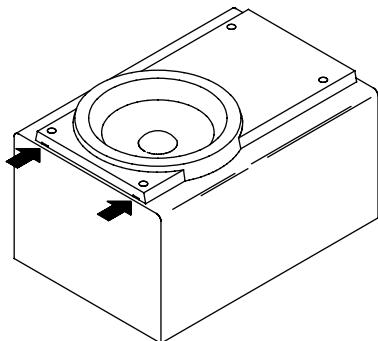
# TAPE MECHANISM EXPLDED VIEW 2/2



## SPEAKER DISASSEMBLY INSTRUCTIONS

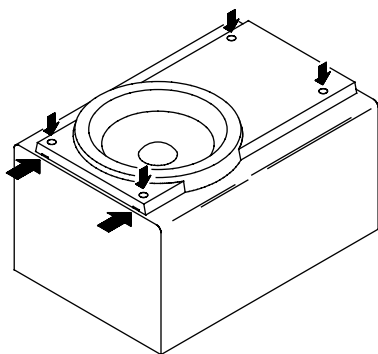
### Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



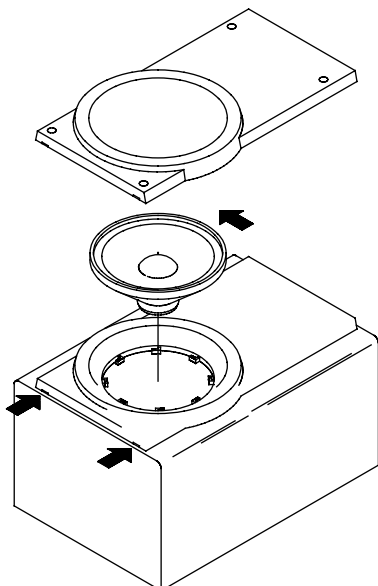
### Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

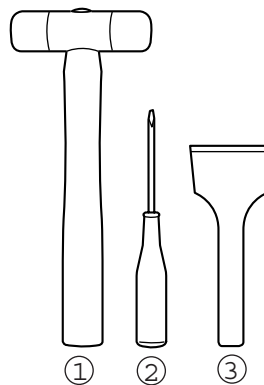


### Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



### Type.4



#### TOOLS

- ① Plastic head hammer
- ② (⊖) flat head screwdriver
- ③ Cut chisel

### How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.
2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.
3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

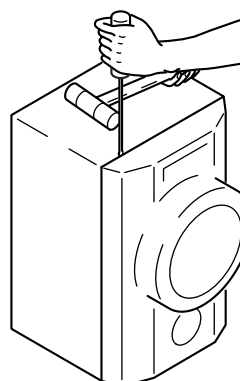


Fig-1

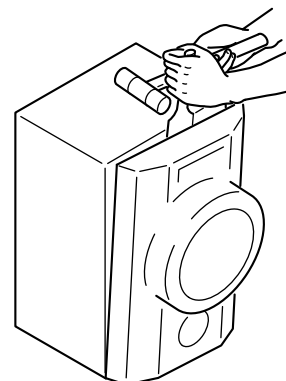


Fig-2

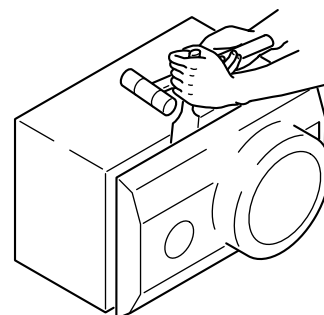


Fig-3

### How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-DS8-001-010		PANEL,FR
2	8A-DS8-004-010		PANEL,DUCT
3	8A-DS8-005-010		GRILLE,FRAME ASSY
4	8A-DS8-009-010		PROTECTOR,
5	88-NS5-610-010		CORD,SPKR
6	88-NS5-611-010		CORD,SPKR B/L
7	8Z-NSY-003-010		CORD,BUSH
8	88-NS3-029-010		CORD,BUSH L
9	8Z-NS7-602-010		SPKR, W 160
10	8Z-NSY-604-010		SPKR, M 100
11	8Z-NSY-608-010		SPKR, CERAMIC ASSY
12	8A-NSJ-006-010		BADGE,AIWA S35